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DEPARTMENT OF ECONOMIC AFFAIRS

ECONOMIC SURVEY

OF

EUROPE IN 1950

Prepared by the

RESEARCH AND PLANNING DIVISION
ECONOMIC COMMISSION FOR EUROPE

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PREFATORY NOTE

The *Economic Survey of Europe in 1950* is the fourth in a series of annual economic reports prepared by the Research and Planning Division of the Secretariat of the Economic Commission for Europe. These reports, together with the quarterly *Economic Bulletin for Europe*, are intended to serve the needs of the Commission and to help in the task of reporting on world economic conditions which the Economic and Social Council of the United Nations has entrusted to the Department of Economic Affairs.

The *Survey* is published on the responsibility of the Secretariat, and the views expressed in it are not to be attributed to the Commission or to its member Governments. The basic statistics on which the analysis is based are, however, mainly derived from official sources or, in some cases, supplied directly by the member Governments, and the amount of attention given to economic affairs in individual countries necessarily tends to vary according to the availability of information. In particular, the fact that disproportionately little attention has been given to economic developments and problems in eastern Europe is attributable mainly to the paucity of detailed information on these countries.

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ERRATA

Chapter 2 — THE EXPANSION OF PRODUCTION

Page 36, left-and column, paragraph 2, line 5 : For " three economies." read " five economies."

Page 40, right-hand column, paragraph 3, line 3 : For " 1945 " read " 1950 ".

Chapter 5 — THE PROBLEM OF INFLATION

Page 133, Chart 7. Base . 1948 = 100 ; for Germany, western zones : 1949 = 100

Page 151, right-hand column, paragraph 3, lines 11-14 : The phrase " particularly as real wages.. ... consumption." should be deleted.

ECONOMIC SURVEY

OF

EUROPE IN 1950

SYMBOLS EMPLOYED

The following symbols have been used throughout this SURVEY :

..	=	not available
—	=	nil or negligible

In referring to combinations of years, the use of an oblique stroke—*e.g.*, 1948/49—signifies a 12-month period (say from 1 July 1948 to 30 June 1949). The use of a hyphen—*e.g.*, 1947-1949—signifies an average of the full period of calendar years covered (including the end years indicated).

Unless the contrary is stated, the standard unit of weight used throughout is the metric ton. The definition of "billion" used throughout is one thousand millions. Minor discrepancies in totals and percentages are due to rounding.

In general, information received up to 20 April 1951 has been included in the SURVEY.

Chapter 1

THE CHANGE IN THE ECONOMIC SETTING IN 1950

The fifth post-war year was one of continued and in some respects unexpected progress in European production. For the area as a whole, industrial output increased by a further 14 per cent over 1949, largely owing to a continued rise in productivity. Agricultural production in Europe also increased, but, as in previous post-war years, the expansion was not commensurate with that in industrial production. Investment activity was maintained at a high level, and most countries continued to devote a much greater share of their total resources to the further expansion of their productive capacities than they had before the war. The continued high rate of progress in most countries appeared to confirm Europe's capacity for economic growth and, by contrast with earlier periods, to demonstrate the rates of progress attainable when investment is active and full employment is maintained.

The rise in production was accompanied by an impressive and fairly general growth in trade among European countries. The main exception was in trade between eastern and western Europe, which remained low and seemed destined to fall still more. Within each of these two areas, however, trade continued to expand. Europe's imports from overseas countries declined slightly and its dependence on North-American sources was further reduced compared with earlier post-war years, while the volume of its overseas exports rose sharply. The dollar problem, which loomed so intractable only a year before, appeared well on its way to solution. The reserve position of sterling was greatly strengthened, leading to the suspension of Marshall Aid to the United Kingdom at the end of the year, and the gold and dollar holdings of a number of other European countries also increased.

The improvement in Europe's external position was, of course, made possible by the rise in its export capacity as production increased, and was facilitated by the currency readjustments made towards the end of 1949 to remove price disadvantages which appeared at that time to threaten export recovery. Clearly, however, a major factor in the export rise in 1950 was the marked increase in the tempo of economic activity and in the strength of demand overseas. In the course of the year, and particularly after the outbreak of the Korean war, European economic life became increasingly influenced by external developments, as the world economic setting was completely transformed from that of a year earlier. A review of the nature and extent of these changes in the world economy generally is therefore a necessary prelude to a further examination of the economic problems and outlook of European countries.

1. World Production and Prices

The Rise in Industrial Production

In contrast to the relatively small increase in 1949, world industrial production rose by some 13 per cent in 1950—a rise greater than that in any of the earlier post-war years, when many countries had achieved rapid increases as capacity was reactivated, and about as great as any previous year-to-year rise in world industrial output.[1] As may be seen from Charts 1A and 1B, the extraordinary size of this increase was due to the concurrence—partly coincidental—of three major factors : the continuance of a fairly rapid and steady growth in a number of countries, among which the Soviet Union and the United Kingdom have the heaviest weights, a strong recovery in western Germany and a marked cyclical upturn in the United States after the 1949 recession.

[1] The only previous peacetime jump of comparable magnitude seems to have been from 1935 to 1936, when industrial production for the world as a whole rose by about 15 per cent as a rapid recovery set in from the extremely low level which had been reached, especially in North America and Germany, during the depression See *World Production and Prices, 1938/39*, League of Nations, pp. 39 and 103.

In western Germany [1] the delayed and, for a time, hesitant recovery of production from the low post-war level gained headway rapidly in 1950 and, by the end of the year, the rate of output was greater than it had been in 1938. For 1950 as a whole, industrial production in western Germany exceeded that of 1949 by more than one-fourth. There was a somewhat similar development in Japan, although recovery there was less rapid and the level of production remained substantially below pre-war.

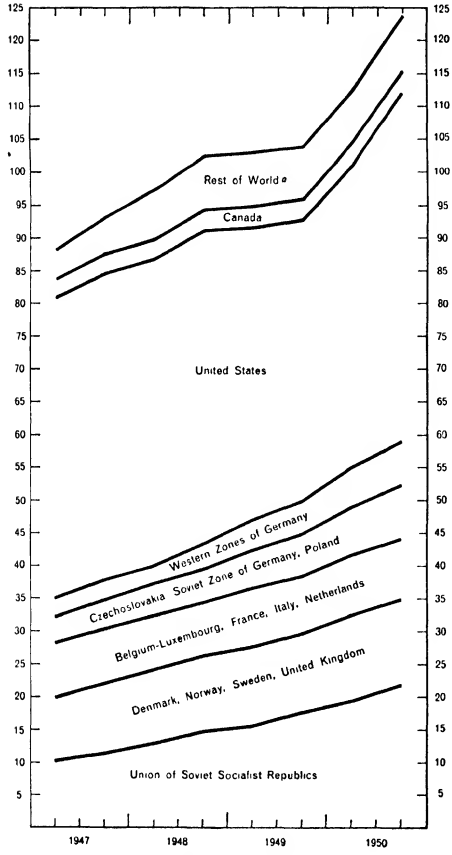
[1] References to "western Germany" in this document apply generally to the three western zones of occupation Unless otherwise stated, western sectors of Berlin are included only in trade and payments discussions.

Chart 1

WORLD INDUSTRIAL PRODUCTION

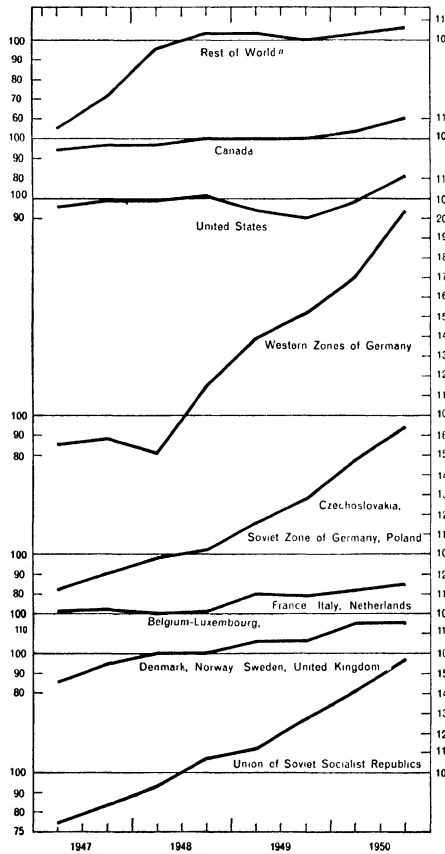
A. Contribution of Individual Countries or Areas (Cumulative)

World total 1948 = 100



B. Index Numbers for Individual Countries or Areas

1948 = 100



Sources and methods see Appendix B.

a "Rest of world" also includes European countries not elsewhere specified

However, it was, of course, the sharp upturn in the United States which provided the major contribution to the movement of world industrial output in 1950 compared with 1949 and to the marked change in the general economic climate over this short period. United States industrial production had already begun to recover in the latter part of 1949 from the recession earlier in the year and rose by no less than 20 per cent in the course of 1950. Although the increase in the average level for the year was little different from that for the world as a whole, the expansion in United States industrial output accounted for no less than 40 per cent of the global increase and was greater in absolute amount than that in all of Europe outside the Soviet Union.

The Shortfall in Primary Production

There is a good deal of evidence that this rapid expansion of world industrial production in 1950 was inadequately supported by increased production of raw materials. From Table 1, showing a consolidated index of world output of the principal industrial raw materials compared with the movement in world industrial production,[1] it would appear that, in 1950, the rate at which materials were being fed into the production process lagged far behind the rate at which finished products were leaving it.[2] This was partly no more than a reversal of an opposite tendency in previous years : following the war, there was a need in many countries to replenish working capital, so that production of some materials tended to rise faster than actual consumption by industry and, with the slowing-down of world industrial production in 1949, there appeared to be some excess accumulation of stocks. The marked divergence of the two series in 1950 nevertheless gives a clear indication that a substantial increase in world production of materials will be required not only to support any

[1] The data cover world production excluding the Soviet Union, since information on the latter's production of raw materials is inadequate for inclusion in the world totals It is believed that this does not significantly impair the comparability of the two series for the rest of the world, as the net foreign trade of the Soviet Union in raw materials appears to be small in relation to total world supplies

[2] For purposes of this comparison, the index of industrial production should, in principle, be limited to manufacturing only and exclude mining (since metallic ores are included in the raw materials, while coal and other fuels are left out altogether), but this has not been possible, because inadequate details are available concerning the components of the industrial production series for some countries However, since the output of mining generally increased more slowly than that of manufacturing, corrected indices would show a greater discrepancy

Table 1

THE MOVEMENT OF WORLD [a] INDUSTRIAL PRODUCTION COMPARED WITH THE PRODUCTION OF INDUSTRIAL MATERIALS

Index numbers — 1946-1950 = 100

Industrial sector	1946	1947	1948	1949	1950
Total					
Industrial production [b] . .	85	94	102	103	116
Production of raw materials [c] . . .	82	96	106	108	108
Textiles					
Production of cotton and wool cloth	89	96	104	100	111
Production of cotton and wool yarns	91	95	100	100	113
Production of cotton and wool fibres	86	95	106	112	101
Metals and Engineering					
Production of engineering industries	86	97	103	100	114
Production of metals	75	95	105	106	119
Production of metallic ores	79	95	106	105	115

Sources and methods see Appendix B

[a] Excluding the U S S R

[b] Including mining, and other manufacturing industries as well as textiles, metals and engineering.

[c] Weighted series for iron ore, copper ore, lead ore, zinc ore, tin ore, bauxite, natural rubber, synthetic rubber, sulphur, cotton, wool and wood-pulp. See Appendix B

further increases in finished output, but probably even to sustain the existing level.[1]

The data in Table 1 also show that the spread between raw material production and consumption in 1950 was most marked in the case of the natural fibres, cotton and wool. The sharp fall in the output of fibres mainly reflects the reduced American cotton crop in 1950, which was due largely to acreage restrictions on planting. The concurrent rise in world demand for cotton textiles brought about a fall of some 5 million bales in the cotton stocks accumulated by the United States Government in earlier years when production had exceeded demand. In wool, world production since the war has been fairly steady, but at a level substantially below current consumption in the textile industries,[2] the difference being met by drawings on large stocks built up during the war by Governments and exporters. These stocks were virtually exhausted in 1950 [3] with the further rise in world output of wool yarns and tissues.

The divergence between the movement of the index-numbers appears less marked in the case of metals than in textiles. Over the post-war period as a whole, world production of metallic ores, including both ferrous and non-ferrous, has risen rapidly, with tendencies towards an excess in 1948 and 1949 and a shortage in 1950. The comparison between the movement of output of metallic ores and that of metals and engineering products tends, however, to understate the seriousness of the situation as it developed in 1950. This is because, as in wool, the war left a large reserve of materials—in this instance, in the form of scrap—which has served to cover a substantial part of the requirements of the metal producing and consuming industries, notably in iron and steel production.[4] These extraordinary supplies of war scrap have been largely exhausted during the last few years and in 1950 even working stocks of scrap were seriously depleted in most European countries. It thus seems clear that further consumption needs will have to be met from natural ores to a greater extent than in the recent past.

Among the raw materials contained in the global index in Table 1 but not in any of the subdivisions shown, sulphur, which plays an essential role in numerous branches of industrial production, appears to be the most important case in which the failure of production to keep pace with consumption requirements may have serious repercussions.

The difference between the trend in raw material supplies and that in industrial activity in 1950 seems to have been common to most countries. An indication of the relative trends in several leading western European countries and in the United States is provided in Table 2, giving the results of computations of the movement of raw material supplies in relation to current consumption by industry. The data do not show the absolute level of raw material supplies and consumption or absolute changes in stocks—since sufficiently comprehensive information on these points is not available—but the changes in relative trends during the last two years emerge fairly clearly from the movement of the ratio of the index of supplies to that of activity for each of the countries shown. A change in the ratios shown in Table 2 is taken as indicative of a corresponding change in the rate of accumulation of stocks of raw materials or partly manufactured goods, which is probably the dominant factor over short periods of time, although the ratios may also be influenced by changes in the commodity composition of industrial output and by changes in the average quantity of raw materials consumed per unit of output.[5] It should be added that, for each of the European countries covered by the comparison, the changes are attributable principally to variations in the rate of imports, since these countries are heavily dependent on raw material supplies from outside sources, and their imports tend to fluctuate more than either domestically produced supplies or industrial activity.

[1] This conclusion seems valid in view of the size of the divergence in 1950, although there is a tendency for manufacturing production to rise faster, in the long run, than the input of raw materials. This long-term trend occurs for several reasons, among the principal ones being the development of more elaborate manufactures whose raw material costs are smaller in relation to labour and capital costs, economies in raw material use through technical improvements, and the increasing use of synthetic materials.

[2] In interpreting the data in Tables 1 and 2, and comparing the results with such information about absolute levels of stocks as is provided elsewhere in this SURVEY—*e.g.* in Table 37—it should be continuously borne in mind that a discrepancy between the index numbers of products and supplies may indicate a change in the *rate of change* of stocks or work in progress in factories.

[3] See Table 37

[4] It is not possible statistically to distinguish war scrap from other forms of "old scrap" (i.e., scrap arising other than as waste from the current production of the steel and steel-consuming industries), but the trend of total consumption of old scrap is significant. This is estimated by the Power and Steel Division of the Economic Commission for Europe to have increased in western Europe from about 8 million tons in 1936–38 to 14½ millions in 1949 and 16½ millions in 1950.

[5] For an explanation of the data, see the notes to Table 2 and Appendix B.

Table 2

SUPPLIES OF INDUSTRIAL RAW MATERIALS (EXCLUDING FUELS) COMPARED WITH INDUSTRIAL ACTIVITY [a]

Index numbers — 1949 = 100

	Period	United States		United Kingdom	Western Germany	France	Italy [c]
		including cotton	excluding cotton [b]				
	1949						
Supplies of raw materials	First quarter	88	89	89	87	99	116
	Second quarter	101	107	111	108	113	104
	Third quarter	112	104	113	100	97	95
	Fourth quarter	99	100	87	105	90	85
	1950						
	First quarter	99	104	91	111	120	120
	Second quarter	118	128	108	115	101	98
	Third quarter	126	144	99	119	89	120
	Fourth quarter	114	130	92	152	90	102
	1949						
Industrial activity	First quarter	106	106	99	89	101	95
	Second quarter	96	97	100	99	107	101
	Third quarter	97	97	96	103	91	98
	Fourth quarter	101	100	105	109	100	106
	1950						
	First quarter	109	108	108	106	98	107
	Second quarter	116	116	110	123	103	114
	Third quarter	122	122	106	137	91	110
	Fourth quarter	127	127	116	148	109	125
	1949						
	First quarter	*83*	*84*	*90*	*98*	*98*	*122*
	Second quarter	*105*	*110*	*111*	*109*	*106*	*103*
	Third quarter	*115*	*107*	*118*	*97*	*106*	*97*
	Fourth quarter	*98*	*100*	*83*	*96*	*90*	*79*
Ratio Supplies / Activity	Annual average	*100*	*100*	*100*	*100*	*100*	*100*
	1950						
	First quarter	*91*	*96*	*84*	*105*	*122*	*112*
	Second quarter	*102*	*110*	*98*	*93*	*98*	*86*
	Third quarter	*103*	*118*	*93*	*87*	*98*	*109*
	Fourth quarter	*90*	*102*	*79*	*103*	*83*	*82*
	Annual average	*97*	*107*	*88*	*97*	*100*	*97*

Sources and methods see Appendix B

[a] The indices of raw material supplies show changes in the value, at constant 1949 prices, of total home production plus imports minus exports of major industrial raw materials excluding fuels The indices of industrial activity are derived from official index numbers of production with the component industrial series re-weighted according to the estimated relative value of their consumption of the materials included in the supply indices

[b] Raw cotton is excluded from the supplies index and cotton manufacturing industries from the industrial activity index

[c] Imports only

The greatest change shown by Table 2 is in the position of the United Kingdom. There would seem to have been a tendency to accumulate stocks in the second and third quarters of 1949, which may have been partly seasonal, but may well have been influenced by increased imports in anticipation of devaluation. Since then, the trend has been in the opposite direction, with a particularly sharp fall in the movement of supplies in relation to the industrial activity in the fourth quarter of 1950. The evidence of this development is supported by the statement of the Chancellor of the Exchequer that total stocks of raw materials, excluding petroleum, fell by £40 million at end-1950 prices during the year.

In both France and Italy, the movement in supplies was also extremely sluggish in relation to the rise in industrial production towards the end of the year, although the results in France for the year as a whole were dominated by exceptionally heavy supplies in the first quarter.

In western Germany the development has been rather different. While for the full year 1950 the increase in supplies was less than that in industrial activity compared with the preceding year, the situation changed abruptly in the fourth quarter as imports rose even faster than industrial production.

In comparing the results for western Germany, France and Italy with those for the United Kingdom, it must be remembered that the major divergences which have been found for the world as a whole between raw material production and consumption seem to have been those which relate to cotton and wool, as is shown in Table 1, and the reductions in stocks of these commodities were registered primarily in overseas countries and in the United Kingdom. The relative importance of the decline in cotton stocks in the United States is shown by comparison of the two sets of series for that country, the one including and the other excluding cotton. It will be noted that, apart from cotton, the trend was in the direction of considerable stock accumulation in 1950, particularly in the third quarter. Since privately held stocks of raw materials appear to have declined in virtually all instances for which data are available,[1] this trend would seem to reflect operations under the official stockpiling programme which had been inaugurated soon after the war as a precautionary measure, but had not been pushed very vigorously in earlier years. After the outbreak of hostilities in Korea, the rate of stock-piling was greatly accelerated and, as can be seen in Chapter 3, became a major factor in the market for a number of the most important raw materials.

[1] See Table 37.

The Disruption of the Price Structure

The failure of raw material production to keep pace with requirements for industrial consumption in 1950 laid the basis for substantial increases in primary prices. The rise in the prices of many raw materials during the year, accompanied by an upward movement in the whole level of prices and a disruption of the price structure, was, however, far more violent than can be accounted for by the underlying disequilibrium between production and consumption. It was in large measure due to strong political forces affecting the volume and urgency of demand on the world markets. Of these, the most important were the additional demands created by the speeding up of American strategic stock-piling of commodities the supply of which is short, or liable to be cut off in time of war, and the sharp reversal of speculative attitudes. In spite of the divergence between supply and requirements of raw materials during the year, expectations of a fall in prices were still widely entertained in the earlier part of 1950. In the latter part of the year, however, a considerable speculative fervour and general inflationary demand developed, based more on anticipated than on actual increases in military expenditure. As a result of these abnormal demands, wide divergences developed between the prices of individual commodities which did not correspond to their relative scarcity. Rubber and tin are outstanding instances where current and prospective production appears adequate or more than adequate to meet consumption needs, but where price increases have nevertheless been particularly great.

The steep rise in prices and the great divergence between individual price movements are illustrated in Chart 2. It should be noted that, for the most part, the data relate to prices in the principal producing countries and that they may therefore (particularly in the case of commodities moving customarily in tramp freighters) fail to reflect the full extent of the rise in the delivered cost to importing countries. As Chart 3 shows, the development of the world shipping shortage at the end of 1950 brought a very sharp rise in freight rates.

Chart 2

PRICE INCREASES OF SELECTED COMMODITIES IN 1950

Index numbers—December 1950 (December 1949 = 100)

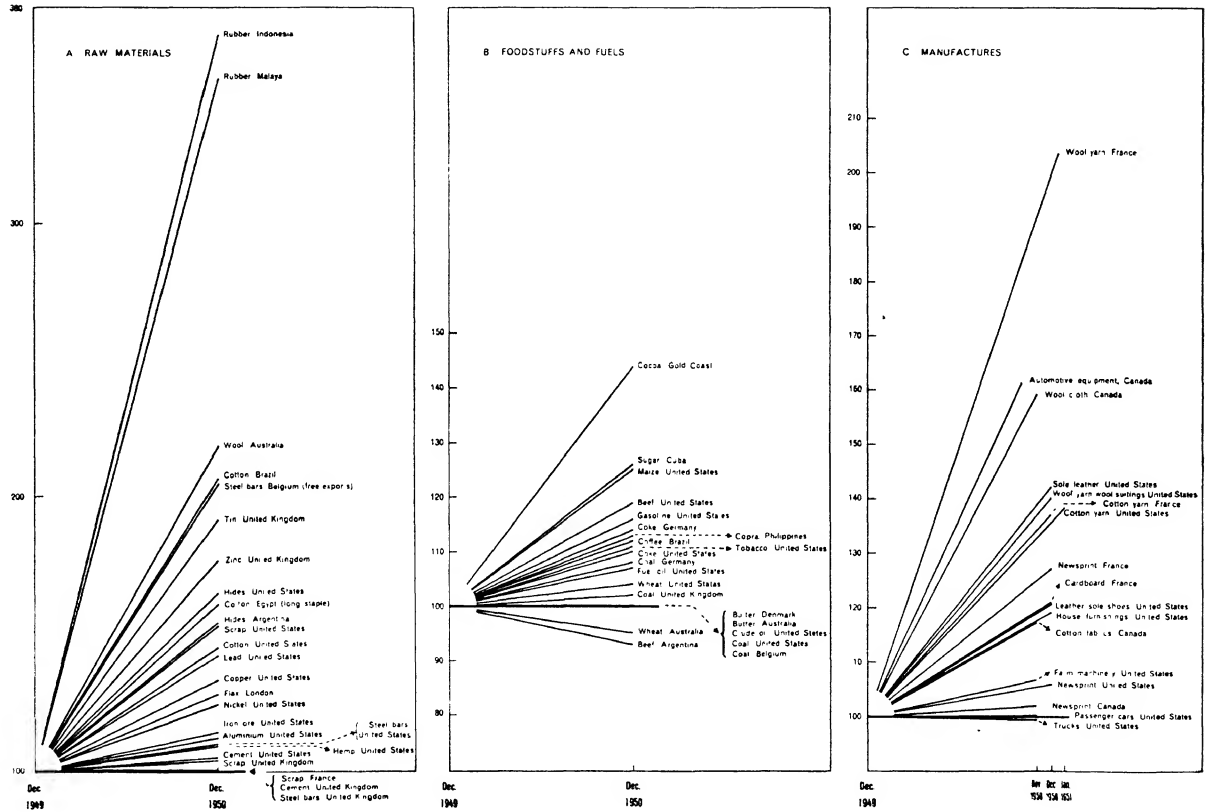
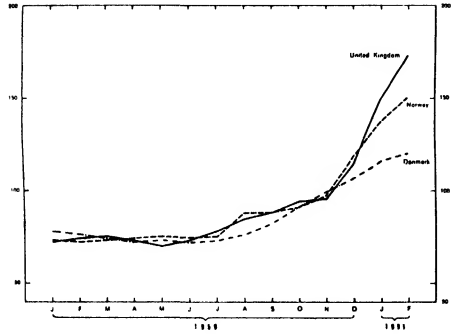


Chart 3

MOVEMENT OF FREIGHT RATES SINCE JANUARY 1950

Index numbers—average 1949 = 100
Sterling rates in terms of dollars



Source *International Financial Statistics*, International Monetary Fund

Price changes as shown by the charts vary not only between different commodities, but also for the same or similar commodities in different markets. In Brazil the price of cotton rose much more than in the United States although both countries produce the same growths. The shortage of steel scrap has been reflected in the sharp rise in the United States price, but not in controlled or administered prices in the United Kingdom and France. Similarly, the prices of steel products in the United Kingdom had scarcely changed by the end of the year, but the much more volatile Belgian export prices rose by over 100 per cent in the course of 1950. The price of newsprint has risen in France very much more than in North America, reflecting the particularly difficult buying position in which France finds herself for newsprint and pulp.

In general, it is apparent that prices of industrial materials—particularly rubber, non-ferrous metals and textile fibres—have increased much more than prices of either foodstuffs or manufactures. The increases in wool and cotton prices are fairly generally reflected in the prices of yarns and cloth, but for most other finished products the price quotations available show relatively moderate changes.

A clearer view of the great structural change which has accompanied the recent evolution of prices is given in Table 3, showing price indices in terms of dollars for the three groups—manufactures, foodstuffs and raw materials—weighted in each case in accordance with their relative importance in trade between the major industrial countries and the principal primary producing areas. In order to indicate the full degree of the movements which have occurred since the currency devaluations of September 1949, the indices are based on the averages for the first nine months of that year. This accounts for the relatively low level of the index for manufactures, which is a composite figure covering both European and United States exports, although here, too, the trend in the last half of 1950 has been definitely upward.[1] It will be seen that between December 1949 and December 1950 raw material prices in terms of manufactures have increased by about 80 per cent.

Table 3

INDEX NUMBERS OF DOLLAR PRICES OF MANUFACTURES, FOOD AND RAW MATERIALS IN WORLD TRADE

January-September 1949 = 100

Item	1949	1950			
	Dec.	March	June	Sept.	Dec.
Manufactures [a]	85	84	84	84	88
Foodstuffs [b]	111	116	113	126	122
Raw materials [b]	94	95	110	154	174

Sources see Appendix B.

[a] Unit values of exports from the United States and major European countries, weighted according to value of exports to other overseas countries. The index numbers relate to quarters

[b] Index numbers of price quotations in dollars (in non-European countries excluding the United States) were weighted as between differing quotations for the same commodity in different markets according to the share of world trade in the commodity held by the country of quotation in 1948 Each commodity index thus obtained was then given a weight in the group index corresponding to the value of total imports of that commodity into the United States, Canada and Europe from the rest of the world in 1948 The commodities considered covered about 75 per cent of all imports into that area of food and raw materials in that year

These great shifts in the structure of prices have produced significant changes in the international distribution of income, particularly between those countries exporting principally raw materials and those exporting principally manufactures. Among European countries, the relative situation thus varies widely, depending on the commodity composition of their export and import trade. For Europe as a

[1] Owing to the paucity of actual price quotations for finished manufactures, the index in this case is made up of export unit values, and the movement therefore tends to lag behind the actual evolution of prices An adjustment for this factor, if it were possible, would not, however, greatly alter the spread between manufactures and the other two series.

whole and also for the United States, the shift in the structure of prices has brought a marked deterioration in their terms of trade with other areas and has been a major factor in the vast changes which have occurred in international trade and payments relationships during the past year.

2. International Trade and Payments

The Expansion of World Trade

Spurred by the rise in world demand, international trade increased by some 11 per cent in volume in 1950, although this was not reflected in the over-all value of trade, measured in dollars, because of the lower average dollar prices resulting from the widespread currency devaluations in the latter part of 1949. As may be seen in Table 4, a large part of the increase in volume was accounted for by intra-European trade, which rose from quarter to quarter during the year and, as in 1949, took a particularly vigorous leap forward in the last three months. For the full year 1950, the volume of intra-European trade was about one-fourth greater than in the preceding year. The rate of expansion in Europe's overseas exports was about the same and was especially great in the final quarter, when the volume was more than one-third larger than a year earlier. Imports from overseas, on the other hand, were just below the 1949 volume.

However, over one-third of the increase in Europe's overseas exports served merely to offset the adverse shift in its import and export prices shown in Table 4. The full effects of this shift had not yet been registered in the value of trade for the last quarter of the year, as will be seen, and the progressive narrowing of the deficit in Europe's overseas trade since mid-1949 will therefore tend to be reversed, unless there is a further very large rise in the volume of exports in relation to that of imports.

The movement in Europe's overseas trade in 1950 was in some respects the counterpart of, and causally related to, an opposite development in United States foreign trade. Although moving up in the last quarter, United States exports remained smaller throughout the year than the 1949 average, while its imports increased sharply. Like Europe, however, the United States experienced a marked deterioration in its terms of trade, and here also the full effect had not yet been felt by the end of the year.

The chief beneficiaries of these changes in the trade of Europe and the United States were the remaining overseas countries, whose total exports increased in dollar value from 1949 to 1950, chiefly because of the rise in primary prices, while their imports, although greater in volume, fell in dollar value because of the lowering of prices through the 1949 devaluations. A significant part of the increase in the trade of these countries seems to have been in their trade with one another.

The Changed Pattern of Settlements

The upsurge in United States imports and the spectacular rise in raw material prices, together with the fall in United States exports and the rise in European exports, produced sweeping changes in the pattern of international settlements in 1950 and severely altered both the character and the magnitude of the dollar problem.

In 1949, as may be seen in Table 5, the United States had huge surpluses on current account with all the other countries or major trading areas shown, adding up to an over-all surplus of some $5.8 billion. By contrast, each of these other countries or areas was in an over-all deficit position, with the exception of Canada and the United Kingdom. Canada had net claims on Europe greater than its own deficits with the United States and Latin America, and the small surplus of the United Kingdom resulted from its transactions with the overseas sterling countries, which were themselves in deficit with the United States and thus provided no convertible exchange for settling the United Kingdom's adverse balances in trade with the Western Hemisphere. Continental European countries, taken as a group, were at the opposite pole from the United States, having virtually no significant surpluses in any direction to set against their large deficits with North America.[1]

Most of these extreme positions were radically reduced in 1950. The biggest change was the fall of over $4 billion in the total current account surplus of the United States, accompanied by a swing in the

[1] For a fuller description of the network of current account balances in 1949 and the resulting problems of international settlement, see the *Economic Survey of Europe in 1949*, pp. 166–170. (In all further references, this document will be referred to as last year's Survey)

position of Canada to a net deficit because of the cut in its export surplus with Europe. The counterpart to these changes may be seen, above all, in the position of the raw material producing areas outside the Western Hemisphere, shown in Table 5 in two groups : " Europe's affiliated areas " and " Other overseas " countries. It will be noted that both of these groups either decreased their deficits or increased their surpluses on current account with the United States as well as with the United Kingdom and Continental Europe. As a result, the group of overseas countries affiliated with Europe, in which the sterling area members are the most important, shifted spectacularly from an over-all deficit of $1.6 billion in 1949 to

Table 4

QUARTERLY MOVEMENTS IN THE VALUE, VOLUME AND UNIT VALUE OF INTERNATIONAL TRADE

Billions of dollars in f.o.b. prices and index numbers

Period	Intra-European Trade [a]	Europe's Overseas Trade [a]		United States		Rest of World [b c]		Total World Trade [c d]
		Imports	Exports	Imports	Exports	Imports	Exports	
Value								
(*Billions of dollars*)								
1949 January-March	3 3	3 4	2 5	1 8	3 3	6 2	5.6	14 7
April-June	3.5	3 7	2.4	1 6	3 4	6 0	5.5	14 8
July-September	3 4	3.3	2.3	1 5	2 7	5.5	5.3	13 7
October-December	3 2	2.7	2 0	1.8	2.6	5 3	5.2	13 0
1950 January-March	3 3	2 8	2 0	1 9	2 3	5 0	5 4	13 0
April-June	3 4	3 0	2 1	1.9	2 5	5 2	5 5	13 5
July-September	3 5	2.8	2.3	2.4	2 4	5 9	6.4	14 6
October-December	4.2	3 3	2 9	2 6	2 9	7 2	7.3	17.3
Volume								
(*Index numbers — January-September 1949 = 100*)								
1949 January-March	97	96	104	105	102	105	101	101
April-June	103	105	98	100	108	102	101	103
July-September	100	98	98	96	88	93	98	96
October-December	117	96	110	113	88	104	107	106
1950 January-March	121	97	114	118	79	98	107	105
April-June	124	102	117	117	85	99	104	107
July-September	129	91	127	133	81	108	112	112
October-December	148	98	155	136	92	.		.
Unit value								
(*Index numbers — January-September 1949 = 100*)								
1949 January-March	101	103	101	104	103	100	101	101
April-June	100	100	101	99	100	100	100	100
July-September	99	97	98	97	97	100	99	99
October-December	80	82	74	96	95	86	88	85
1950 January-March	81	84	74	98	94	86	91	86
April-June	80	85	75	101	93	89	96	87
July-September	81	91	74	110	95	91	104	91
October-December	84	97	78	119	101			

Sources see Appendix B.

a The U S S R is treated here as part of Europe

b Including trade between the countries of this area as well as their trade with the other areas shown in the table

c Excluding China

d Total exports (= total imports) Intra-European trade has been measured from the export side

Table 5

NETWORK OF CURRENT ACCOUNT BALANCES

Millions of current dollars

Year	GROSS DEFICITS	United States	Latin-American republics	Canada	Other overseas countries	United Kingdom	European affiliated areas [a]	Europe excluding United Kingdom	GROSS SURPLUSES
1949	—								
1950	*490*					*40*	*450*		
1949	650	650							
1950	*250*	*250*							
1949	600	550	50						
1950	*350*	*250*	*50*				*50*		
1949	1400	1250	100	50					
1950	*300*	*250*	*50*	—					
1949	800	300	—	450	50				
1950	*230*		*100*	*50*	*80*				
1949	2000	500	200	100	300	900			
1950	*900*		*200*		*200*	*500*			
1949	3330	2550	80	200	—	100	400		
1950	*2900*	*1450*	—	*100*	*50*	*500*	*800*		
1949	8780	5800	430	800	350	1000	400	—	
1950	*5420*	*2200*	*400*	*150*	*330*	*1040*	*1300*	—	
Net positions: 1949		+5800	−220	+200	−1050	+200	−1600	−3330	
Net positions: 1950		*+1710*	*+150*	*−200*	*+30*	*+810*	*+400*	*−2900*	

Surplus / Deficit / 1949 / 1950 / Deficit / Surplus

Sources and methods see Appendix B

NOTE — The term "current account", as used in this table, relates to the balance on goods and services together with private donations Balances have generally been rounded to the nearest $50 million The totals are the addition of individual figures and thus do not necessarily correspond to the totals given in the tables in Chapter 4 Some of the adjustments made in the tables in Chapter 4 have, moreover, been excluded from this table

[a] The overseas sterling area and the dependent overseas territories of European countries.

a small surplus in 1950. With the United States alone, this group showed a surplus of slightly less than $500 million in place of a deficit of the same amount in the previous year. The remaining group of overseas countries outside the Western Hemisphere eliminated their 1949 over-all deficit of $1,050 million, almost all of which can be accounted for by the change in their position with the United States.

The emergence of a current account surplus with the United States on the part of the overseas sterling countries was accompanied by the appearance of a small surplus by the United Kingdom in its relations with the United States and an over-all British surplus of some $800 million. This occurred despite the decrease in the United Kingdom's own export surplus with the overseas sterling area, which was offset by the rapid improvement in the United Kingdom's balance with Continental Europe. Largely because of an increase in imports from the United Kingdom as well as the rest of the sterling area, the over-all deficit of Continental Europe, considered as an entity, declined very much less than its deficit with the United States.

Despite its reduced size, the current account surplus of the United States still totalled $1.7 billion in 1950. This, however, was considerably more than offset by United States Government grants and credits extended under the European Recovery Programme and various lesser foreign aid measures, which amounted to $4.3 billion, compared with slightly under $6 billion in 1949. The greater part of the aid in 1950 went, as before, to western European countries—roughly $700 million to the United Kingdom before the suspension of aid towards the end of the year and $2,750 million to other European countries.[1] The continuance of American financial aid on this scale, combined with the abrupt fall in the United States surplus on current account, had the effect of contributing some $2.6 billion to the gold and dollar holdings of the rest of the world, of which $1.5 billion went to European countries. More than $900 million of this accrued to the reserves held by the United Kingdom,[2] fed both by the improvement in its own position and by that in the accounts of the overseas sterling area. At the same time, however, the claims of the overseas sterling area on the United Kingdom in the form of sterling balances rose by almost $1.1 billion, partly as the result of sales of gold and dollar funds to the central pool, partly through the current account surplus of the overseas sterling area with Continental Europe settled in sterling, and partly as the counterpart of capital transfers from the United Kingdom, which had the effect of increasing the sterling balances held by banks in the recipient countries.

Alongside this rise in the sterling balances of the overseas sterling area, which offset most of the over-all increase in the United Kingdom's gold and dollar reserves, there was a striking increase in the hard-currency assets of other overseas areas. All told, their dollar balances rose by some $700 million during the year, and at the same time they obtained some $400 million in gold from the United States—a total improvement of $1.1 billion apart from such additions to their gold holdings as may have come from domestic production or other sources. It is thus clear that the trade and payments developments of the past year have strengthened the foreign exchange position of the primary producing countries overseas far more than that of European countries.

[1] The figure of $2,750 million for "other European" countries includes $446 million of aid under the Mutual Defense Assistance Program, some of which presumably went to the United Kingdom. Since a country break-down of this aid is not available here, all of it has been allocated to "other European" countries.

[2] The figure of $900 million refers only to the rise in British balances in the United States plus gold purchased from the United States, as reflected in the American balance-of-payments estimates (see Table XXXI in Appendix A). The total rise in the gold and dollar reserves held by the United Kingdom was, however, some $1.6 billion in 1950, the difference representing gold received directly from South Africa or elsewhere and increases in holdings of Canadian dollars, as further discussed in Chapter 4.

3. The Changed Economic Situation of the Overseas Primary Producing Countries

The forces released by the increased political tension and the acceleration of economic activity in 1950 have by no means exhausted their effects and may be expected to produce further major changes in world trade and prices in the near future. This would be true even if there should be a slowing-down or cessation of armaments programmes and stock-piling, although the effects in this event, while no less disturbing to orderly economic activity, would be rather the opposite to those in prospect. Among the external

influences affecting the prospects of Europe, two are of sufficiently critical importance to warrant further discussion. One of these, considered in the present section, is the large additional rise already in sight in the incomes of the primary producing countries. The other, discussed in section 4 below, is the further expansion of United States demand under the inflationary impact of heavy armaments expenditure.

The Prospective Rise in Export Proceeds

The decline in the current account deficit of the overseas primary producing areas with Europe and the United States to negligible proportions in 1950 reflected only the initial and partial consequences of the shift in world prices on the payments position of these countries. As shown in section 1, the rise in world market prices was extremely rapid in the second half of the year, and by the end of the year the structure of relative prices had moved far in favour of primary producing countries compared with the average unit values of their trade for the year as a whole, which are reflected in their balance of payments for 1950.

The time taken for open market prices to be registered in the recorded value of trade varies from commodity to commodity, but an examination [1] of the price movements of 19 major commodities (covering about 75 per cent of the exports of the primary producing countries to Europe and the United States) during the course of 1950 suggests that the primary producing countries would receive $3 to $4 billion more for their exports of these commodities if the same quantities were traded on the basis of the market prices ruling in December. This gives an indication of the minimum increase in receipts from exports to Europe and the United States which these countries could expect if the December structure of world prices were to rule through the whole year 1951 ; it is not likely that quantities exported will, on balance, be less than in 1950, or that there will be a net decrease in receipts from exports of commodities excluded from the estimate. An increase of $3 to $4 billion would represent a rise of 20 to 25 per cent over 1950 in the value of total merchandise exports to Europe and North America, but this cannot be taken as a forecast of the increase which may actually be expected in 1951 : some prices will fall (some have already weakened), some will rise still further, and some, so far stable, will begin to rise. Of the lower figure in the range, about $750 million is represented by rubber, whose price might well fall substantially ;[2] on the other hand, if prices of foodstuffs begin to climb, as the analysis below suggests is likely, the fall in rubber prices could easily be offset.

Not all of this potential increase in export earnings would accrue, of course, to the primary producing countries, since a part would be remitted to Europe and the United States in the form of profits on foreign investments, particularly in rubber and the extractive industries. Increased freights will also have to be paid to European and American merchant shipping. Despite these uncertainties and qualifications, however, it seems safe to assume, on the basis of present prospects, that there will be an increase of several billion dollars in the foreign exchange receipts effectively at the disposal of the primary producing countries. Such an increase in receipts would represent a significant shift in the distribution of world income. The proportionate loss to Europe and the United States would be small, probably less than 1 per cent of the total national income of the area. The proportionate gain to the primary producing areas would, on the other hand, be much greater—possibly of the order of 5 per cent[3]—owing to their much lower level of *per capita* and total income ; the gain would, however, vary greatly from country to country.

An increase in income of this magnitude could make a welcome contribution to the development of the primary producing countries. A large number of these countries are " under-developed " in the sense that their stocks of industrial, agricultural and social capital, the productivity of their agriculture and industry, and their level of real income *per capita*, are extremely low. The successful development of such countries is of particular importance to Europe. The United States and the Soviet Union are great continental nations occupying many parallels of latitude ; their need for primary commodities from the outside world and their potential gains from the international division of labour are in general important, but nevertheless marginal to their welfare. Europe, on the other hand, following her post-war

[1] See Appendix B.

[2] Since this was written, the London price has fallen, and was in the middle of May 1951 about 20 per cent below the average December level.

[3] This estimate excludes the increase in China and the Soviet Union.

tendency to greater autarky, cannot drive that process much farther without loss of real income. In the process of economic development abroad, Europe will experience some disturbances from the competition of new secondary industries in the primary producing countries (although this effect is often exaggerated), but it can gain from the increased productivity of primary industries which ought to follow the improvements in technique and social organization essential to successful development. On balance, the trend of the terms of trade might continue to be unfavourable to Europe even in the absence of extraordinary forces now affecting the structure of prices, but the adverse movement would be minimized if development abroad proceeded at a steady pace with a regular increase in productivity. The danger in the present situation is that the sudden rise in the incomes of primary producers brought about by the increase in raw material prices will be dissipated in local profit inflation while productivity remains stagnant, as has tended to be the history in many countries since 1938.

The Experience since 1938

During and after the war, these countries generally reduced their economic and political dependence on Europe and accumulated large reserves of gold, dollars and sterling. For a number of well-known reasons, however, they have been unable to take full advantage of this improvement ; some of the balances are blocked, some are required as permanent liquid reserves, and all are substantially depreciated in purchasing power. In addition, internal difficulties in many of the countries concerned and shortages in the first post-war years of particular types of manufactured equipment required, especially from soft-currency sources, have prevented their making the best use of their increased foreign exchange resources.

The drawings on their accumulated reserves, together with other substantial sources of financing, have nevertheless enabled the primary producing countries to cover relatively large deficits on current account and thus to import a greater volume of goods than they would have been able to pay for out of their current export proceeds alone. Table 6 shows that overseas countries, in their transactions with Europe and North America, reduced their holdings of gold and of sterling and dollar balances by $4 billion during the three-year period 1947 to 1949, and received still larger sums through private capital investment and Government grants and credits. At the same time, the purchasing power of their exports increased in terms of imports of manufactures and has in general been considerably more favourable since the war than it was in the immediate pre-war period.

For these reasons, the primary producing countries taken as a group have been able to pay for a greatly increased volume of imports since the war. During the past few years, their imports of what may be termed "developmental commodities"—that is, steel and other metals and manufactures, machinery and transportation equipment—have been more than twice as great as in 1938.[1] These over-all results present, however, an unduly favourable impression of the present position of most of the primary producing countries, and particularly of those areas which may be properly considered as under-developed. Both the financial resources employed and the increased imports obtained from Europe and North America have been, in the nature of things, very unequally distributed. At least half the net private capital invested in other areas by Europe and the United States during the past few years has been concentrated in the increase of petroleum production capacity of American and British companies in northern Latin America and the Middle East. Another large part represented the movements of private capital from the United Kingdom to South Africa and Australia, motivated partly by more attractive earning prospects and lower rates of taxation, but partly also by exchange speculation and by general political uncertainties. Thus, only a small part of total private investment since the war has contributed to the development of backward countries. The greater part of Government grants and credits has also tended to be concentrated in a few main countries on the basis of special political relationships or urgent relief problems.

[1] See last year's SURVEY, Table 75, p 131.

Table 6

GOODS AND SERVICES BALANCE OF THE PRIMARY PRODUCING COUNTRIES [a] WITH EUROPE AND NORTH AMERICA, AND MEANS OF FINANCING

Billions of current dollars

Item	1947	1948	1949	1950
A Goods and services				
Exports	11 1	14 2	13.0	14.9
Imports	13.5	14 2	14 4	13 1
Balance on trade account	−2.4	—	−1.4	+1.8
Income on investments (net)	−1.0	−1 2	−1 1	−1.3
Other services (net)	−0.4	−0 5	−0.1	+0 3
Balance on services account	−1 4	−1 7	−1 2	−1 0
Balance on goods and services	−3.8	−1.7	−2 6	+0 8
B Donations and capital movements				
Private donations (net)	+0.2	+0.3	+0 2	+0.2
Private capital (net)	+2 0	+0.7	+1 0	+0 5
Government grants and credits and special financing (net)	+0.8	+0.7	+2 1	+1 1
Financing by international institutions	—	+0 1	+0.1	+0 1
Total donations and capital movements	+3 0	+1.8	+3.4	+1 9
C. Monetary reserves and other foreign exchange balances (net)				
Monetary gold	+1.3	+1 1	+0.1	+0 2
Dollar balances	+0 2	−0 2	—	−0.7
Sterling balances	+0 6	+0 2	+0 5	−0.9
Total monetary reserves and other foreign exchange balances	+2 1	+1 1	+0 6	−1 4
D. Errors and omissions	−1.3	−1.2	−1.4	−1 3

Sources see Appendix B

[a] For purposes of these estimates, the term "primary producing countries" is used to designate all countries outside Europe, the U S S R , the United States and Canada

A truer perspective of the situation in primary producing countries is provided by Table 7, which shows that, despite the substantial rise in total imports of developmental goods since the war, such imports remained pitifully low in relation to population, except in those countries which were already well advanced in their development. While Australia and New Zealand imported about $90 worth of developmental commodities *per capita* from Europe and the United States in 1950 and South Africa as much as $28, India, Burma, Pakistan and Indonesia imported amounts which in no case exceeded $2 *per capita.* Other countries fall between these extremes. In Latin America, Argentina and Cuba are placed rather favourably, whereas Brazil and Peru come much lower on the list.

It is thus clear that, in vast areas of the world, imports of capital equipment and other developmental goods have been far lower than would be necessary to permit a real start towards economic development, and it also seems that the means of financing have been somewhat haphazardly distributed and by no means in line with the relative needs of the more backward areas. In the light of this situation and the rapidly improving economic position of Europe, plans were being formulated throughout 1950 for more systematic assistance to the most needy areas. It now appears that these plans may be cut short by rising world political tension and the rearmament requirements of the potential suppliers of credit and capital goods. It also appears that the increase already registered in the foreign exchange receipts of

Table 7

IMPORTS PER CAPITA FROM EUROPE AND THE UNITED STATES OF SELECTED PRIMARY PRODUCING COUNTRIES, BY MAJOR COMMODITY GROUPS[a]

Dollars at 1949 pre-devaluation prices

Country \ Commodity group	Metals and Manufactures (3)		Machinery (4)		Transportation Equipment (5, 6)		Total Developmental Commodities (3, 4, 5, 6)		Chemicals (7)		Textiles (8)		Other Manufactures (9)		Total Imports[b]	
	1949	1950	1949	1950	1949	1950	1949	1950	1949	1950	1949	1950	1949	1950	1949	1950
New Zealand	27.97	29.46	29.43	30.39	25 68	31.34	83.08	91.19	6 33	7 92	40.51	52.55	15.69	22 15	157.21	185.18
Australia	13.53	20.95	20.74	25.31	26.45	41.25	60.72	87 51	3.82	4 68	28.45	26.41	11.84	15 26	116.16	144.90
Venezuela	31.25	15.75	34.27	21.81	22.18	18.13	87.70	55.69	6.05	6 94	10.80	10 49	11.34	9.10	142.63	109.06
South Africa	10.31	7.26	18.66	12.71	12.88	7.95	41.85	27 92	2.64	2.35	17.77	11.43	7.03	6.53	76.07	52.18
Argentina	8 16	10.26	9.46	9.49	6.55	6.53	24.17	26.28	1.74	2.92	6.46	1.57	2 22	2.33	38.48	36.65
Cuba	7.14	7.37	8.72	8.99	5.43	9.50	21.29	25 86	5.14	6 54	8.96	13.28	7 06	8.46	74 10	93.61
British West Indies	8.15	7.93	9.04	7 85	5.41	5.48	22.60	21.26	3.11	3 48	8.52	7.58	5.85	6.93	50.41	49.06
Malaya	4.43	4.40	5.66	5 58	3.87	4 37	13.96	14.35	1.98	2 36	4.97	4.03	3.13	3 60	33.29	33 84
Chile	7.14	3.40	10.71	5.94	3.82	2 52	21 67	11 86	2.37	1.90	1.77	1.00	1.40	0.98	31.56	18.44
Mexico	2.72	2.52	4.92	4.99	2 86	2.72	10.50	10 23	2.16	2.44	0.88	0.82	1.19	1.13	19.20	19.90
Brazil	2.43	1.98	4.28	4.24	2.88	2 80	9.59	9 02	1.58	1 76	0 96	0.56	0.74	0.77	15.17	14.52
French Africa	2.94	3 08	3.45	3 34	2.23	2.36	8.62	8 78	0.66	0.77	4.59	4.51	1.84	1.62	23.25	23.41
Egypt	2.69	2 64	3.68	3.14	2.27	2.22	8.64	8 00	1.22	1.40	2.88	3.24	1.24	2.49	16.78	18.07
British East Africa	2.32	2.39	2.63	2.62	2.59	2 56	7.54	7 57	0.32	0.30	1.88	1.59	0.97	0.88	12.02	11.74
Peru	2.16	1.42	3.30	2.63	1.90	2.75	7.36	6 80	1.18	1.08	0.94	0.57	0.65	0.60	13.29	13.11
Iraq	3.00	2.24	4.16	2.66	1.90	1.16	9 06	6.06	0.50	0.48	4.46	3.64	0.90	0.72	17.18	14.24
Iran	2.10	1.99	2.66	2.27	1.52	1.10	6.28	5.36	0.75	0.69	2.53	0.95	0.89	0.70	11.69	8.82
Indochina	0.61	0.59	0.63	0.63	0 60	0 48	1.84	1.70	0.27	0.32	2.23	2.53	0.52	0.62	6.43	7.04
Pakistan	0.39	0.53	0.40	0.54	0.34	0 40	1.13	1.47	0.21	0.25	1.16	0.82	0.31	0.28	3.23	3.13
India	0.40	0.25	0.89	0.65	0 30	0.24	1.59	1.14	0.26	0.21	0.37	0.09	0 21	0.11	2.86	1.99
Indonesia	0.64	0 34	0.82	0.58	0.58	0 21	2 04	1.13	0.17	0.20	1.00	0.76	0.30	0.26	4.65	3.02
Burma	0.24	0.28	0.26	0.23	0.17	0.21	0.67	0.72	0.13	0.18	0.30	0.40	0.12	0.29	1.48	1.80
China	0.02	0.03	0.03	0 01	0.01	0.00	0.06	0.04	0.04	0 02	0.01	0.00	0.04	0.03	0.29	0.17

Sources and methods: see Appendix B.

a The data are derived from the export statistics of the principal European supplying countries and the United States. In 1949 the trade accounted for in the last column represented on the average about 95 per cent of the total exports from Europe and the United States to the overseas countries listed

b Including food, raw materials and unspecified items

the primary producing countries and the still greater increase in prospect may contribute relatively little to the solution of their basic problems.

Uneven Distribution of Increased Earnings

In principle, an increase in the income of primary producing countries providing resources for more rapid development is in every way desirable. In the present situation it is, however, highly uncertain how great a contribution to economic development the prospective shift in world income will make. This uncertainty arises for two main reasons : first, the fortuitous shift in income brought about by the abrupt change in the terms of trade will be most unevenly distributed amongst different countries ; second, the pressure of rearmament and domestic demand, combined with the limits on supply likely to arise from raw material shortages, makes it most unlikely that manufactured goods and other supplies will be obtainable in Europe and North America in sufficient quantity for the transfer of income to be matched by an equivalent transfer of goods and services.

The wide variation in the increase in export earnings of different primary producing countries is caused in part by the varying importance of exports of primary produce in their economies, but chiefly by the great variation in the extent to which the prices of different primary products have increased If all prices were to remain at their December 1950 level, out of the resulting total increase of $3 to $4 billion estimated above, about 70 per cent would accrue to the growers of rubber, wool and cotton. Countries which export none or very little of these commodities would have to share between them only $1 billion, more or less, of the total increase, although they possess the largest proportion of the total population. It is not possible to distribute with accuracy the total $3 or $4 billion amongst individual countries according to the commodity composition of their exports, but some indication of the prospective relative position of a number of individual countries is given at the top of the next column.

The estimates are of course only very rough, owing to the simplifying assumptions on which they are based, but they indicate clearly enough the great differences in the prospects of individual countries. Apart from the wide variation as such, it appears that, judged by the level of their present imports,

Estimated Percentage Increase in Total Export Proceeds of Selected Primary Producing Countries if December 1950 Structure of World Prices becomes effective throughout 1951

Malaya	80–100	Belgian Congo French Indo-China	10–20
Egypt Indonesia Uruguay	40–60	Chile India	0–10
Australia Brazil Ceylon Nigeria Pakistan Peru South Africa	20–40		

NOTE — Countries are selected according to the availability of statistical data and are arranged in alphabetical order within groups The specific assumptions are that unit values of cocoa, tea, oil and fats, sugar, coffee, copper, lead, cotton, wool, hides and skins, rubber, tin and non-ferrous ores and concentrates increase from average 1950 to average 1951 by the same amount as the increase in world market prices for these commodities between May and December 1950 , unit values and prices of unspecified commodities are assumed the same in average 1951 as in average 1950 Quantities are in all cases assumed the same as in 1950

countries shown in Table 7 to be in greatest need would tend to be those who would benefit least.

Scarcity of Developmental Goods

It seems most unlikely that there will be a substantial increase in the total volume of exports of developmental commodities from Europe and the United States. Of the two principal suppliers, the United States, as shown in section 4 below, seems likely to reduce its exports of this type of product, while the United Kingdom has definitely indicated that the exports of its steel and engineering industries, the most important products, will also be lower, on balance, in 1951 than in 1950.[1] It may of course be possible for other European countries with smaller rearmament programmes and, in some cases such as Italy, with idle engineering capacity, to take advantage of the buoyant demand overseas and the restricted export capacity of the United Kingdom and the United States in order to establish their engineering exports in these markets. In particular, western Germany will have the opportunity to make further substantial gains. However, the percentage distribution of the trade, as shown below, implies that the Continental European countries are unlikely to be able to increase their exports enough to affect the total volume significantly.

[1] See *Economic Survey for 1951*, Cmd. 8195, His Majesty's Stationery Office, April 1951, paras 43 and 73.

Shares of Different Countries in Total Exports of Metals and Manufactures, Machinery, Passenger Cars and Transportation Equipment from Western Europe and the United States, to the Rest of the World, excluding the USSR [a]

Exporting Country	*1949* (Percentages)		*1950* (Percentages)	
United States	49	80	39	75
United Kingdom	31		36	
Germany	1	16	4	19
Italy	2		2	
France	8		10	
Belgium	5		3	
Other western Europe	4		6	
	100		100	

[a] Based on volume figures valued at 1949 pre-devaluation prices

If, for example, the volume of exports of developmental commodities from the United States and the United Kingdom declined in total by 10 per cent, it would require a very considerable percentage increase in the value of these exports from the other western European countries merely to maintain the 1950 total volume, let alone to increase it significantly.

Thus, for Europe, there are prospects of a moderate shift in the inter-country distribution of export production. For the under-developed countries taken as a whole, it seems likely that, just at a time when they have financial resources of their own available, they will not be able to spend them on the goods which, in the long run, they need most for their welfare. In addition, there may be a tendency, as occurred in the war, for such of the new financial resources as can be appropriated for development to be misdirected—new plants may be built merely because a particular type of equipment remains available, while more important projects are deferred and existing plants are inadequately maintained.

Supplies of Consumers' Goods

There may be better prospects for an increase in the supplies of manufactured consumers' goods. Section 4 below suggests that inflationary pressure in the United States is likely to lead to a reduction from that source, but the United Kingdom is planning a substantial increase,[1] and in Europe generally rearmament will bear less directly on this class of export than on developmental goods. Even here, however, export production may be limited by shortages of raw materials, especially textile fibres, the prospects of which are discussed in detail in Chapter 3.

[1] See *Economic Survey for 1951*, Cmd 8195, His Majesty's Stationery Office, April 1951, paras. 101–103,

Increased imports of consumers' goods would help to reduce inflation in the primary producing countries and enable local Governments to devote internal resources, especially labour, to many important forms of development which do not require large quantities of imported equipment, with less inflation than would otherwise be the case and less need for difficult fiscal measures. In many of the under-developed countries the need for roads, bridges, dams and irrigation and land clearance schemes and the need to acquire new techniques of economic organization is greater than, although obviously complementary to, the need for imported equipment.

The Rising Danger of Inflation

It seems most unlikely, however, that there will be an increase in imports of manufactured consumers' goods which would come near to being sufficient to offset that part of the increased incomes—generated by the increase in export receipts of the primary producing countries—which would normally be earmarked for consumption, unless prices of manufactures rise very much more rapidly than now seems likely. No doubt a proportion of the additional incomes will be saved by individuals and Governments, and, in addition, Governments in some instances are introducing special measures to block the increase in domestic purchasing power. The most effective of these, in primary producing countries, appears to be the imposition of export taxes, which are relatively easy to administer and which sterilize inflationary income at the precise point where it is generated. European countries which control or influence fiscal policy in dependent overseas territories are in a position to encourage this form of anti-inflationary measure, but experience shows that they may encounter a strong political opposition from producing interests, especially in cases where much of the industry is owned in the metropolitan territory, so that its leaders are able to exert pressure on both sides of the globe simultaneously. The recent British experience with regard to rubber duties in Malaya provides an interesting illustration of these difficulties. Although the new rate of tax appears high and has provoked considerable opposition, it will almost certainly be insufficient to prevent substantial inflation in the territories concerned.

In spite of these measures, there is likely to remain a large volume of new current demand which, owing to the limits on available supplies from Europe and

the United States, can be spent only inside the primary producing area as a whole or within the particular countries whose export prices have risen most violently.[1] Owing to the inelastic supply of consumers' goods in these countries, such additional demand is likely to lead to open inflation and rising prices.

Inflation of this type in the primary producing countries will generalize and enhance the pressure of inflation in the world as a whole : it will affect all primary producing countries, including those that benefit least from increased export prices. Thus, in some countries, the over-all terms of trade (as against their terms of trade with Europe and North America) might, on balance, deteriorate. After allowing for some increase in the prices of manufactured goods, it appears that India, for example, is in this danger. Open inflation in primary producing countries yields regressive changes in the distribution of income, deterioration of political and social morale, and an atmosphere generally inimical to successful economic development. The increased incomes will be unevenly distributed not only between countries, but also between classes. In the present situation the major share will accrue to Australian wool growers, Malayan and Indonesian rubber growers (both estate companies and smallholders) and Singapore merchants, while the rising cost of living will reduce the real income of wage earners in manufacturing industries, salary earners and others who do not benefit from the export boom in the countries concerned. Long-run consequences may be equally serious. It must be expected that, sooner or later, some of the present extraordinary demands will come to an end ; if this should happen suddenly and without adequate safeguards to ensure the maintenance of demand in general, there would doubtless be a drop in the prices of many key raw materials, yielding another disturbing and arbitrary re-distribution of world income.

In addition, the primary producing countries are the area through which the main forces of external inflation are transmitted to Europe. In primary producing countries with a low standard of living, a high proportion of additional outlay is normally spent on food, particularly if supplies of imported manufactures are scarce. This implies a probability that world food prices, which have so far increased less than those of raw materials, will rise in 1951, and possibly also that the supplies of food available to Europe will be limited by increased demand in the producing countries. Thus, on the one side, the pressure on Europe will come through increasing prices and on the other side through rising demands on its export industries.

The central cause of the problem is the volatility of prices of primary products—due to their short-run inelasticity of supply. For this reason, prices could not have failed to react violently to the uninhibited release on to the primary markets of increased civilian demands concurrently with abnormal demands for military purposes. The present inflation in primary producing countries could have been avoided only if Governments in Europe and North America had taken steps to restrain civilian consumption of strategic raw materials at the same time as they began to increase their demands for strategic purposes. Such measures would have been unpopular politically, but at least would have limited the extreme depreciation in the value of money with which citizens of many countries are now faced.

The inflationary situation has already developed to such an extent that counter-measures taken now are likely to prove too late. Governments are restricting civilian consumption of scarce materials, but it is unlikely that these restrictions will yield any substantial decline in the general level of primary prices ; and the analysis above has shown that further inflation seems inevitable even if raw material prices do not rise above their current levels.

Schemes for international allocation of raw materials may, however, show some beneficial results. Such schemes are difficult to operate, owing to the divergent interests they have to serve, and their mere existence tends to maintain an atmosphere of scarcity and high prices. But, in principle, international allocation does imply a reduction of inflation through limitation of money incomes below the level to which they would otherwise rise. Co-operation of primary producers could hardly be expected unless the schemes were accompanied by long-term policies to ensure stability in prices and income and by some measures to ensure the supply of manufactured goods from Europe and North America. It is also clear that certain countries in the greatest need and yet not benefiting from increased export returns will continue to need special assistance if programmes for orderly economic development are not to be indefinitely delayed.

[1] In Malaya, for example, the production of tin and rubber, practically all of which is exported, generates by far the largest part of the national income : a weighted average of the prices of these two commodities rose by 100 per cent between May and December 1950.

4. The Economic Outlook in the United States

The course of events during the past few years has afforded striking evidence of the important influence exercised on the rest of the world by economic developments and policies in the United States. In retrospect, it is clear that the weakening of international commodity markets in 1949 and the attendant fears of troublesome surpluses and excess capacity were not a normal expression of long-run economic forces, but grew largely out of the temporary industrial recession and heavy inventory liquidation in the United States at that time. It is also now clear that these events, together with the speculative exchange operations which they helped to create, contributed strongly to the development of the dollar crisis of 1949. Similarly, the spectacular rise in world production and trade in 1950 and the equally spectacular change in Europe's dollar balance and the deterioration in its overseas terms of trade may be ascribed in large measure to the renewed economic expansion in the United States, and the acceleration of its stockpiling operations.

Up to a point, an internal economic expansion in the United States obviously has beneficial effects on the rest of the world. Indeed, as emphasized in past SURVEYS, a sustained and vigorous growth of American production, income and demand could be considered as a necessary pre-requisite for the restoration of a workable balance in the pattern of world trade. By 1949, it had become apparent that American aid to Europe—as distinguished from the more basic and long-term problem of financing economic development overseas—had already fulfilled the urgent post-war need for relief and reconstruction. Its continuation at that time appeared necessary, not so much for the addition it made to total European resources available for investment and consumption, but rather to bridge the margin between the volume of goods which, with the existing structure of production and levels of income and prices, the rest of the world desired to obtain from the United States and that which the United States imported from other countries. The most effective way of closing the gap was clearly through the maintenance of a high and rising level of economic activity in the United States, together with the creation of trading conditions more conducive to the stimulation of American import demand. Before the outbreak of open hostilities in Korea, however, it could scarcely have been foreseen that the change in the economic climate in the United States would reach a point where it gave rise to new economic maladjustments and tensions no less serious than those which were being overcome.

Inflation

The rise in world raw material prices in the second half of 1950, largely induced by increased consumption and Government stock-piling in the United States, was accompanied by increasing signs of a cost-price inflation in the United States itself. Thus, average hourly earnings of workers in American industries, which were constant in the course of 1949 and increased at a steady quarterly rate of 1½ per cent during the first three quarters of 1950, rose by 3 per cent—or double the previous rate—in the last quarter. Similarly, consumer prices, which showed a steady or slightly falling trend until the middle of 1950, rose at the quarterly rate of 2½ per cent in the second half of the year. However, the rise in prices in the United States over this period was the result of the pressure of high employment and of speculative buying and inventory accumulation by traders and manufacturers[1] following the events in Korea, rather than of increased military expenditure itself, which did not become a significant factor until the last quarter of the year. During the calendar year 1951, military expenditure will probably amount to about $32 billion, at 1950 prices, compared with about $13 billion in the calendar year 1950 and, of course, will accelerate during the year.[2] This figure does not include a contemplated

[1] Aggregate business inventories increased at an annual rate of $9 billion in the last quarter of 1950, compared with about $2 billion in the first and second quarters.

[2] The development of *actual* expenditure on the military services, as against budget appropriations, may be estimated as follows (billions of dollars, annual rates, at approximately 1950 prices).

Calendar years							
1950				*1951*			
13.0				32.0			
Quarters							
III	IV	I	II	III	IV	I	II
1950	*1950*	*1951*	*1951*	*1951*	*1951*	*1952*	*1952*
11.6	15.7	22.7	30 4	36 2	38 3	40 6	42 4

The above data are derived from *The Economic and Political Hazards of an Inflationary Defence Economy*, Appendix C, Table 1, page 55, material prepared for the Joint Committee on the Economic Report, 82nd Congress, 1st session, Washington, February 1951. The Committee based its estimates on an analysis of the recent trend of appropriations and expenditures, the Draft Federal Budget and the planned rate of increase of manpower in the armed forces.

increase of $4 to $5 billion under the foreign military aid programme, which, for present purposes, may best be considered as part of United States defence outlay. Nor does it include the increase of about $2 billion in expenditure on atomic energy and the promotion of defence production.[1]

The President, in his Annual Economic Report presented to Congress in January 1951, expressed the hope that the considerable increase of about 7 per cent which had been achieved in real national product in 1950 will be repeated in 1951. At the average prices ruling in 1950, this would add some $20 billion to the gross national product of the United States and would thus appear less than sufficient to cover the increase in expenditure. The increase in production will, however, inevitably be accompanied by a rise in employment, hours worked, and rates of pay, as well as by advances in farm and business incomes, with the result that consumers' expenditure and private investment is bound to be higher than in 1950. Unless counter-measures are effectively applied, the increase in total demand for goods and services in the public and private sectors is therefore bound to exceed the increase in supply.

According to a survey made shortly after the beginning of the year,[2] business expenditure on plant and equipment was planned to be at a level about 30 per cent higher in 1951 than actual outlay in 1950, the greater part of the increase being in manufacturing, transportation, public utilities and mining. There may also be some increase in investment in other sectors of the economy, particularly in agriculture, although the shortage of materials and Government restrictions will tend to hold down construction of dwellings and other less essential private construction. Allowance must also be made for the change in the volume of business inventories, which, in 1950, increased by over $4 billion. Taking account of all these factors, and allowing for some decline in the rate of inventory accumulation, the net increase in private investment, measured at average 1950 prices, could scarcely be put at less than $5 billion.[3]

The prospective increase in consumer spending is more hazardous to estimate. This is partly due to the uncertain factor of private saving, which fell after Korea as a result of the accelerated buying of durable goods and, for this reason, might now tend to show a corresponding rise. However, on the basis of the assumed movement in the volume of national income, the increase in consumer expenditure in 1951, before taking account of tax increases or other measures that might be employed to restrict consumption, could not be put at less than $10 billion, again measured at 1950 prices.

On this reckoning, therefore, there would be a prospective total increase in public and private expenditure of about $40 billion in 1951, or $20 billion more than the expected increase in the gross national product at constant prices. This difference is the potential " inflationary gap " which will inevitably necessitate either a curtailment of real consumption or a further decline in the net balance of external payments, or a combination of both. Since it is most unlikely that a gap of this magnitude could be closed wholly or mainly through a fall in exports or a rise in imports, it appears inevitable that real consumption must fall below the level which would otherwise be associated with the contemplated rise in national output.

It thus appears that, if there were no further changes in the balance of payments, there would have to be a fall in real consumption of about $10 billion compared with 1950, in place of a rise of $10 billion which would normally have occurred. In itself, such a reduction would not represent a severe burden, in view of the relatively high living standards of the United States, and would still leave consumption *per capita* at least as high as in any year before 1949. The problem is rather the way in which the reduction is to be made effective in face of buoyant consumer demand and the strong competing interests in play. Broadly speaking, there are three methods : one is the orthodox but always politically unpalatable method of reducing personal incomes by increasing the rate of direct taxation. Another is that of permitting the wage and prices spiral to run its course until prices outdistance wages enough to enforce the inevitable reduction in real consumption. Finally, there is the possibility of reducing consumption through rationing and other restrictions on the volume of goods and services available for purchasing ; unless these restrictions are effective over the whole field of consumption, this method succeeds only to the extent that, when consumers are unable to buy

[1] *Op. cit.*, Table 2, page 58.

[2] See *Plant and Equipment Expenditure*, Securities and Exchange Commission, Washington, 27 March 1951.

[3] Total private domestic investment in 1950 was estimated at $49.4 billion. *Survey of Current Business*, March 1951, page S-1.

the goods they prefer, they save part of the frustrated expenditure rather than divert it entirely to outlets which remain free from restriction.

Some increase in United States prices is bound to take place merely as a result of the pressure of high employment on wage rates and thus on production costs. This process has already got under way, and, taking account of increases so far, the minimum rise over the 1950 average for the whole range of goods and services which make up the national product could easily be of the order of 10 per cent.[1] But it is impossible to say how high prices and money wages would actually rise if the gap between monetary demand and goods available were to be closed exclusively by letting inflation work itself out in the required increase in prices over earnings. The increase might be considerable if wage rates become increasingly tied to the consumer price-index, since the impact of the reduction in consumption must then be concentrated on unorganized labour, Government employees and other groups with fixed incomes or low bargaining power.

To combat an inflationary development of this nature, the Administration proposed to Congress on 2 April tax increases, retroactive to 1 January 1951, sufficient to yield $10 billion in a full fiscal year. Of the $10 billion, that part falling directly or indirectly on personal incomes—and hence of chief interest in closing the inflationary gap—is about $7 billion.[2] Hence, even if the requisite tax increases were fully and speedily adopted, there would still appear to remain a potential inflationary excess of money demand in 1951 amounting, on the present estimates, to about $13 billion, which would tend to be expressed in further price increases or to be transmitted to other countries through changes in the balance of payments.

Prospective Changes in the Foreign Balance

The structure of the United States foreign trade is such that much of this inflationary demand may, in fact, be passed on to other countries. About 60 per cent of United States imports consists of industrial materials and semi-manufactures, the demand for which, in times of boom, is price-inelastic but is not likely to be enhanced further by the excess of monetary demand. But about one-fifth of United States imports consists of manufactured goods and foodstuffs, and some part of the excess demand will probably go to increase imports of these goods. On the export side, 55 per cent is made up of machinery and other finished manufactures, most of which, in each individual case, represent only a very small proportion of total home production and consumption. These exports are therefore very sensitive to any inflationary pressure at home. At the other extreme is the 20 per cent of total exports which consists of crude materials (of which half is represented by cotton), where in nearly all cases a substantial proportion of total production is exported.[3] However, in view of their large share in the total, the influence of the manufactured goods which are sensitive to inflation is likely to be predominant in determining total exports. Some idea of the potentialities of the situation may be gained from the fact that the total value of exports of manufactured consumers' goods reported in 1950 represents less than one-fifth of the sum estimated above to be the potential inflationary excess of monetary demand in 1951. These exports could almost be wiped out altogether, an event which would alone reduce the United States balance of payments by $2 billion.

Recent trends in the foreign trade of the United States support the conclusion that inflation in the United States is likely to react strongly on the foreign balance. The summary half-yearly data presented in Table 8 show the progressive character of the reduction in the United States current account surplus over the past two years. By the second half of 1950, the over-all surplus had virtually disappeared if, as is desirable for purposes of the present analysis, transfers of almost $450 million under the Mutual Defense Assistance Program are excluded from exports.[4] In

[1] Many finished goods have risen more than this already, but various of the prices paid by consumers for services—such as public utility rates and rents—are much stickier.

[2] The remaining $3 billion was to come from higher corporate taxes and, as it would probably fall chiefly on corporate savings, is of less significance as an anti-inflationary weapon.

[3] For example, in 1950, United States exports of automobiles, parts and accessories (valued at f o b. wholesale prices) represented about 5 to 6 per cent of domestic consumer expenditure on the same commodities (valued at delivered retail prices); whereas about a third and a quarter of the total crops of cotton and tobacco respectively are normally produced for export.

[4] The amount of aid effectively transferred under the Mutual Defense Assistance Program was $446 million in the second half of the year, compared with $71 million in the first half. These transfers consist mainly of military items and some related materials and equipment and can best be considered as part of United States Government defence outlays (as indicated in the preceding discussion of the inflation problem) and would therefore need to be excluded from the trade and current account balance. Full information is not given on the geographic distribution of this aid, but it appears that about 85 per cent was for the account of western European signatories of the North Atlantic Treaty.

Table 8

UNITED STATES BALANCE OF PAYMENTS ON CURRENT ACCOUNT

Millions of current dollars

Item	1949		1950	
	First half	Second half	First half	Second half
With European countries				
Exports	2,562	1,884	1,743	1,852
Imports	644	529	606	889
Services (net)	— 27	— 80	—198	—193
Private donations	—192	—193	—158	—154
Balance on current account	1,699	1,082	781	616
With Non-European countries				
Exports	4,341	3,550	3,309	3,775
Imports	3,077	2,894	3,349	4,443
Services (net)	642	513	616	592
Private donations	— 73	— 57	— 64	— 63
Balance on current account	1,833	1,112	512	—139
With all countries				
Balance on current account	3,532	2,194	1,293	477
Same, adjusted to exclude M D A P. [a] shipments	3,532	2,194	1,222	31

Sources Derived from *Survey of Current Business*, United States Department of Commerce, June 1950, and from data for 1950 furnished directly by the Balance of Payments Division, United States Department of Commerce

[a] Mutual Defense Assistance Program These shipments amounted to $71 million during the first, and to $446 million during the second half of 1950

transactions with non-European countries, the balance had, in fact, become passive as the rise in imports outstripped exports. Even with Europe, the surplus had become relatively small if direct military shipments are excluded. This tendency towards a United States deficit on current account appears likely to be reinforced under present conditions, particularly in transactions with non-European countries.

In trade with the primary producing areas, United States imports can be expected to rise in volume and still more in total value. Given the projected increase in United States production, additional imports of raw materials will be required and will be limited, not by demand, but by the amount of supplies available overseas and by such agreements as may be made for international allocation. It is still more certain that the average cost of United States imports will be very much higher than in 1950, as prices were rising in the course of the year, and even by December the recorded value of imports was far from reflecting the full extent of the price increases since Korea. Even if the increase in the total volume of United States imports from non-European sources should prove to be moderate, it is not unreasonable to expect that the total value in 1951 might be as much as $2 billion greater than in 1950, when account is taken of the delayed impact of price increases. This estimate is in line with the analysis already made of the prospective rise in export receipts of the primary producing countries. On the other hand, it is obviously unlikely that the increased import demands of those countries will be satisfied. Apart from the effects of excess demand within the United States already discussed, there will also be the direct effects of the priorities assigned to defence production and the severe cuts imposed on the production of civilian-type goods. Thus, the volume of United States exports may well decline rather than increase, although the effect of this on the total value would tend to be offset, at least to some extent, by the gradual rise in the prices of United States manufactures.

There may also be some offsetting change in service transactions, particularly through increased United States earnings from foreign investments, but the net result seems likely to be a large deficit in its total current account balance with the primary producing countries.

The same forces which have produced a sharp deterioration in the United States terms of trade with primary producing countries will tend to improve its terms of trade with Europe and thus work in the direction of a renewed increase in the current account surplus with that area. In addition, a large part of United States exports to Europe is drawn from the group of commodities (crude materials) exports of which are less sensitive to inflation, as discussed above. In respect of quantities of goods exchanged, the major items in United States exports to Europe are unlikely to be seriously affected by supply shortages. This should be true of tobacco, for example, and cotton exports should also increase if the larger crop target is achieved. In addition, coal exports from the United States, which have been negligible since mid-1949, may alone amount to as much as $200 or $300 million (including freight earned by American vessels). In brief, United States exports to Europe may be expected to average somewhat more in price and may also increase in total volume.[1] It is, on the other hand, vain to try to anticipate the course of European exports to the United States and their effect on the current account balance. The present state of demand is clearly such as to provide opportunities for the sale of European products of a type and magnitude which seemed wholly implausible a short time ago. The contract for the delivery of over $50 million worth of French industrial alcohol for the production of synthetic rubber in the United States is an illuminating example of the kind of development which may occur. On the other hand, European countries will themselves be confronted with shortages of industrial materials and with strongly competing demands at home and in other export markets for their manufacture. The net result for the trade and current account balance with the United States thus depends largely on the speed and scope of rearmament programmes in Europe and on the relative strength of inflationary forces affecting demand not only in Europe and the United States, but also in Europe's other overseas markets.

Despite this great uncertainty regarding the level of its imports from Europe, the conclusion seems warranted that strong forces are now operating to shift the United States current account balance with the world as a whole to a sizeable deficit. Such a shift would, in itself, add in some measure to the inflationary forces already at work in other countries, while helping to close the inflationary gap in the United States. But if these induced effects on the balance of payments, together with positive measures taken in the United States to combat inflation, should still leave a significant margin between money demand and the volume of goods available in that country, the consequent additional rise in United States internal prices, coupled with the effects of the degree of cost inflation which may be regarded as inevitable, would further strengthen the powerful inflationary forces already at work in Europe and in the rest of the world. High prices for United States exports, even though matched by still higher prices for United States imports, must transmit themselves into the general price level of other countries, partly through a tendency for the prices of many commodities to follow automatically the corresponding quotation in the United States, partly through the impact of United States export prices on wage levels, and partly through the inflationary effects of high profits in other countries' export industries. For Europe, these consequences would be felt both directly and in a roundabout way through trade with the primary producing countries.

[1] This is again exclusive of MDAP shipments, which alone may be expected to total several billions of dollars, but are left out of the trade and balance-of-payments analysis for reasons already explained.

5. European Economic Prospects

The discussion so far has been more about global economic developments and the outlook for the near future in overseas countries than about Europe itself. For countries as closely integrated into world trade and as dependent on overseas imports as most European countries are, events in the outside world are always relevant and, in times of great economic change, indispensable to a consideration of the European economic scene. This is not to suggest, however, that Europe's economic destinies are mainly determined from the outside nor that the behaviour and policies of European countries are themselves of only minor influence on the course of world economic developments. The inter-play of internal and external economic forces clearly emerges in the following chapters reviewing European economic activity during the past year and the problems now facing European countries.

At the beginning of this chapter, it was suggested that a substantial increase in world raw material production would be required to maintain world industrial production at its 1950 level. A more detailed examination of the past and potential future growth of industrial production in Europe leads to the conclusion that, were it not for these shortages, European industrial output could probably rise by another 13 per cent in 1951, although the increase would be rather differently distributed geographically from that which occurred in 1950. In fact, the increase is likely to be substantially smaller, particularly when account is taken of disturbances arising out of the shift in production to military goods. The problem is only partly one of imported materials, although supplies of a number of the most important commodities will feel the impact of the greatly increased American demand : European consumption of raw cotton and wool can scarcely rise above 1950 levels, rayon output will probably be reduced as one of the many industrial repercussions of the sulphur shortage, and non-ferrous metals, despite some rise in world supplies available for current use, will doubtless continue to hold back output in European metals and engineering industries. The most basic and direct limitations on European production are, however, in the two major industrial materials produced in Europe itself, coal and steel, where the failure of European countries to solve their production and distribution problems now becomes disturbingly evident. Even with the aid of renewed imports from the United States, coal supplies for current European consumption in 1951 will probably be no more than 5 per cent greater than in 1950, and the shortage of coke and other steel-making materials may keep steel output from rising appreciably above the level already achieved at the end of 1950—that is, about 10 per cent above the average for the year.

The growth that may be expected in 1951 in total European production—including agricultural production and services, which ordinarily rise more slowly than industrial output—is unlikely to be much greater than the increase in the claims upon it from two sources : the deterioration in the terms of trade with overseas countries because of the great rise in raw material prices and the increase in Government demand for defence programmes. Even in the absence of other disturbances, these changes would threaten the maintenance of monetary stability, already precarious in many countries, because of the problem of adjusting the level and distribution of disposable income to the new developments on the side of supply. The problem of monetary stability is, however, greatly aggravated by the fact that the price structure has been unhinged, and the distribution of income seriously disturbed, by the steep rise in import prices. Rising export prices also add fuel to internal inflation, even where the whole benefit accrues as undistributed profits in the export industries. The different inflationary forces are present in varying proportions and degrees in different European countries and correspondingly the immediate problems for economic policy are different. In some countries, like the United Kingdom and Sweden, the main problem is in the field of wage policy. In others, for instance France, the maintenance of budgetary equilibrium is paramount, and in others still, such as the Netherlands and Norway, the problem of inflation presents itself primarily in the form of balance-of-payments difficulties. Eastern European countries, although largely insulated from the external inflationary forces now affecting western Europe, are faced with difficulties in maintaining balance between total supply of and demand for consumers' goods.

The discussion of the problem of inflation in the concluding chapter of this SURVEY does not invite optimism concerning the present trend of events. Though the heightened international tension and the prospects of increased military outlays are at the root of the price disturbances already experienced, the impact of increased spending on armaments in Europe itself has hardly begun to be felt. In addition to the inflationary effects of expanded Government demand, the internal cost and price levels of European countries are bound to continue the rise already started in response to higher import prices, if existing exchange rates are maintained ; the adaptation of domestic prices and wages to the increases in costs of imports already recorded is still far from complete. If European wages and internal prices, and hence export prices, were allowed to continue to rise, a new equilibrium might in time be reached between prices of raw materials and manufactures in world trade. But this method of adjustment, involving as it does a depreciation in the internal value of national currencies, has all the evils of inflation—the most important of which are widespread unintended and inequitable changes in the distribution of real wealth and income and the further weakening of public confidence in the value of money.

An examination of the past experience and inflationary situation in various countries suggests that some of them should be able to hold in check the inflationary pressure of demand resulting from the expansion of armaments programmes, but that no country will find it easy, by domestic measures alone, to mitigate the rise in prices and the unintended changes in the distribution of income flowing from an externally induced cost-inflation without running the risk of further stimulating aggregate demand. Price controls and subsidies may hold down the rise in the cost of living, but unless the excess purchasing power thus set free is mopped up by taxes paid out of incomes as distinct from capital, a state of suppressed inflation is likely to result from their adoption.

A more direct way of preventing high prices abroad from exercising a further inflationary influence on European countries would be through an appreciation of their currencies. By this means, the cost of imports in terms of domestic currencies would be lowered and the rise in export prices restrained. At the same time, the resulting improvement in the terms of trade of European countries should serve to strengthen rather than to weaken their balances of payments at a time when supplies not only of raw materials but also of manufactures are short in relation to demand.

Chapter 2

THE EXPANSION OF PRODUCTION

1. Introduction

The total production of commodities in Europe (excluding the Soviet Union), which had reached approximately the pre-war level in 1949, rose by about 9 per cent in 1950.[1] As in the previous four years, the lion's share of the increase in output was concentrated in the field of industry. Industrial production—already 9 per cent above the immediate pre-war level in 1949—increased by a further 14 per cent and, in the last quarter of the year, was running at a rate which, even after rough adjustment for the normal seasonal peak, was more than one-quarter higher than in 1938.

As in 1949, a large part of the total European increase—in 1950 nearly two-fifths—was due to the belated but recently rapid recovery of German industrial output. Nevertheless, even if Germany is excluded as a special case, an increase of 10 per cent is shown for the rest of Europe. This rate of growth, though less than was achieved in the immediate wake of the war, was greater than in the previous year : in countries where production had been stagnating or even falling, notably France, it picked up again in the second half of the year.

Industrial Production in Europe, excluding Germany
(corresponding quarter of the previous year = *100*)

	1947	*1948*	*1949*	*1950*
First quarter	116 [a]	121 [a]	110	109
Second quarter	117	112	109	108
Third quarter	112	109	107	110
Fourth quarter .	112	111	107	111
Year . .	114	113	108	110

[a] The fuel crisis in the first quarter of 1947 affects the comparability of the figures for that quarter and for the first quarter of 1948

As between countries, increases in production were very unevenly spread : the eastern countries continued to industrialize their economies at a fast rate ; the United Kingdom and the other countries of north-western Europe (excluding Germany) somewhat improved on the steady rate of growth achieved in the earlier post-war years ; the southern and western continental countries, which were already lagging behind the others, lost further ground.

Contributions of Different Areas to Total Industrial Production in Europe, excluding Germany

	Percentage share in total production	Percentage share of total increase over the previous year		
	1950	*1948*	*1949*	*1950*
Northern and north-western countries [a]	50	45	40	45
Southern and western continental countries [b]	35	33	30	26
Eastern countries [c]	15	22	30	29
Europe, excluding Germany	100	100	100	100

[a] Denmark, Finland, Ireland, the Netherlands, Norway, Sweden and the United Kingdom
[b] Austria, Belgium, France, Greece, Italy, Luxembourg, Portugal, the Saar, Spain and Turkey
[c] Bulgaria, Czechoslovakia, Hungary, Poland and Rumania

As between industries, the progress made was less unevenly distributed, and the figures in Table 10 provide evidence of substantial advances in all branches. In addition, the dispersion of the rates of increase of particular important industries about the average seems to have been reduced in each of the last two years ; in 1950, for the first time since the war, the increase in the index for engineering was less than that in the general average.

Indices of Production in the Industries of Sixteen European Countries [a]

	1948 (1947 = 100)	*1949* (1948 = 100)	*1950* 1949 = 100)	*1950* (1938 = 100)
Engineering	121	118	112	139
Chemicals	126	114	116	152
Crude steel	129	115	109	118
Coal [b] .	109	108	103	97
Electric power	113	108	113	173
Building materials	123	110	111	120
Textiles	115	113	113	110
Total industry	117	114	112	128

[a] Austria, Belgium, Czechoslovakia, Denmark, Finland, France, western Germany, Greece, Hungary, Ireland, Italy, the Netherlands, Norway, Poland, Sweden and the United Kingdom The industrial production of these countries was, in 1950, about 85 per cent of the total for Europe.
[b] Hard coal equivalent.

[1] This is of necessity only a rough estimate which takes account of known changes in industrial and agricultural production and building and makes some allowance for the relative decline in the importance of the output of the handicraft trades.

Table 9

INDUSTRIAL PRODUCTION

(Index numbers based on 1938 and 1948)

Country	Percentage share [a] of total in 1950	*1938 = 100*				*1948 = 100*							
						1949				1950			
		1947	1948	1949	1950 [b]	First quarter	Second quarter	Third quarter	Fourth quarter	First quarter	Second quarter	Third quarter	Fourth quarter [b]
Austria	1.6	56 [c]	89 [c]	120 [c]	142 [c]	113	133	139	149	149	155	157	171
Belgium	2.8	106	114	116	120	106	104	95	102	103	103	101	117
Bulgaria	0.5	145	175	227	280	..	..	..	..	.	..	.	..
Czechoslovakia	3.8	93 [c]	110 [c]	127 [c]	147 [c]	109	120	119	114	124	138	140	132
Denmark	1.6	123	135	142	155	104	108	100	115	113	122	110	125
Finland	0 6	117	133	142	145	106	108	100	115	113	115	97	110
France	11.3	92	108	118	121	112	117	101	112	109	112	102	121
Saar	0.3	49	67	83	88	122	122	125	130	130	120	132	148
Germany :													
western zones	15.4	33	50	75	96	139	146	148	162	164	178	194	220
West Berlin	0.5	31	28	19	28	66	60	60	80	81	90	103	134
Soviet Zone	5.8	47	60	72	91	..		.	.		.	.	.
Greece	0.6	69	75	89	112	107	115	121	130	127	140	158	172
Hungary	1.6	75	107	153	207		.	..	..	..			..
Ireland	0.5	122	134	143	161	100	107	105	117	114	123	119	124
Italy	5.8	86	91	96	109	101	108	105	112	114	121	116	129
Luxembourg	0.2	109	145	138	146	113	104	88	80	92	97	102	111
Netherlands	2.8	95	113	127	139	107	111	109	122	117	121	125	135
Norway	1.0	115	128	140	151	113	112	95	115	122	121	103	125
Poland	4.4	104 [d]	143 [d]	175 [d]	213 [d]	109	117	124	137	149	156	164	170
Portugal	0.4	112	118	109	115	90	89	89	100	88	92	106	101
Rumania	1.1	55	83	117	160	..	..	.	..	..	..		..
Spain	3.3	127 [e]	127 [e]	130 [e]	144 [e]	95	104	98	109	110	116	113	113
Sweden	3.7	141	150	157	165	106	108	95	110	110	114	99	118
Turkey	0.7	151	156	161	159	95	111	105	108	101	105	102	
United Kingdom	29.7	115	128	137	150	107	107	102	113	117	116	111	125
Total of countries listed	100.0	82	96	109	124	110	114	109	119	121	125	123	137
United States		210	216	198	225	96	91	90	91	94	101	109	113

Sources see Appendix B.

NOTE — The indices in general cover manufacturing, mining and gas, water and electricity supply, but not building In some instances, however, the index numbers do not cover the food, woodworking, clothing and printing industries The quarterly indices may cover less than the annual indices

Some of the quarterly data are based on national monthly indices which are adjusted for variations in the number of working days per month, and some on unadjusted indices

In all cases the link between 1938 and the post-war period has been made on the basis of pre-war weights In a number of cases, however, the calculation of annual and quarterly indices for the post-war years is on the basis of post war weights. See Appendix B.

a The figures in this column were obtained by applying the volume indices shown for 1950 (1938 = 100) to 1938 weights which are proportional to net output The figures thus calculated take no account, therefore, of shifts in relative prices since 1938.

b Provisional

c 1937 = 100

d Current production compared with 1938 production in pre-war area

e 1940 = 100

Between 1938 and 1950, however, total industrial output in the sixteen countries covered by the figures above rose by over one-fourth, engineering output by well over one-third. Moreover, in each of the post-war years the countries showing the biggest proportionate increase in total industrial output were also the countries whose engineering output rose by more than the national average for all industries ; the countries which made the smallest progress were those whose engineering industries experienced a slump. The acceleration of the rate of growth in European production in the second half, and particularly in the last quarter of 1950, largely reflected the resumption of demand for French and Belgian engineering products.

Table 10

SUMMARY INDICATORS OF ECONOMIC ACTIVITY IN EUROPE

Index numbers based on 1938 and 1949

Item	Including Germany					Including Germany	Excluding Germany
	1938 = 100					*1949 = 100*	
	1947	1948	1949	1950	1950 Fourth quarter	1950	1950
Total industrial production	82	96	109	124	132	114	110
Engineering	85	102	119	133	147	112	107
Chemicals	93	116	132	152	163	116	114
Textiles	75	87	98	110	119	113	110
Building materials	84	102	111	124	132	112	110
Energy							
Coal	80	87	94	96	99	103	102
Lignite	94	103	113	120	129	106	105
Oil consumption	114	134	145	168	.	116	116
Electric power	122	137	148	166	173	113	113
Total energy consumption	92	100	105	112	..	106	106
Basic metals							
Iron ore	58	78	90	91	101	101	99
Pig-iron	63	87	100	106	116	107	101
Crude steel	70	91	106	116	124	110	104
Finished steel	73	91	105	117	128	110	105
Chemicals							
Soda ash	81	98	101	119	..	117	112
Sulphuric acid	79	96	107	116	.	109	105
Calcium carbide	63	84	102	114	..	112	105
Caustic soda	70	132	152	172	..	113	105
Fertilizers [a]		114	123	140	..	114	111
Building materials							
Cement	73	93	110	127	132	115	112
Building bricks	58	65	73	82	..	112	109
Engineering products							
Merchant ships	77	88	96	113	130	118	111
Motor vehicles :							
Passenger cars	51	67	102	145	163	143	132
Commercial vehicles	128	157	194	235	257	121	116
Agricultural tractors		408	427	605	.	142	125
Textile products							
Cotton yarn	76	84	97	106	113	109	107
Wool yarn	92	105	115	127	132	109	105
Rayon	85	107	140	172	191	123	123
Sawn softwood							
Production		94 [b]	102 [b]	100 [b]	..	98	97
Consumption		87 [b]	98 [b]	91 [b]	..	101	.
Wood-pulp							
Production		77	84	95	.	114	112
Consumption		77	89	102		115	114

Sources The figures have been derived from other tables in this chapter and in Appendix A. The country coverage of the series is that of the individual tables from which they have been taken. The data relate to production unless otherwise indicated.

[a] Including superphosphates, nitrogenous and potassic fertilizers

[b] 1934-1938 = 100

The chemical industries continued to expand at a rate well above the average in all European countries. Their output, which largely consists of industrial materials and fertilizers, was in 1950 half as much again as in 1938. The output of other basic materials, however, continued to lag behind manufacturing output ; for example, coal production rose in 1950 by only 3 per cent, and the production of iron ore by only 1 per cent. In the case of sawn softwood and wood-pulp, small rises in output occurred, but these still left European production and consumption well below pre-war levels.

Outside the industrial sector, progress was slow and uneven. Handicrafts continued to decline in those countries (eastern Europe and Germany) where they had been important. Building activity, in the few countries for which indices are available, rose slightly, but in western Germany and the United Kingdom was still below the 1938 level. Progress in agriculture was mainly in the output of animal products ; grain harvests were more or less unchanged in size and output. In 1950, the output of bread grains was about 3 per cent below the average of the years 1934-38 and livestock numbers were back to about the 1934-38 levels. All in all, in spite of a quadrupling of the stock of tractors since 1938 and a substantial increase in the supply of artificial fertilizers, the recovery of agriculture during the last five years seems to have been little faster than that achieved in the quinquennium after the First World War.

A similar comparison between rates of industrial recovery shows very different results. As a result of the increased rate of industrialization achieved in eastern Europe and the maintenance of a steady, and high, level of demand in some of the older industrialized countries, Europe has been able to achieve in five years an expansion of industrial output for which ten years were needed in the 'twenties. Even so, the expansion has been held in check by two factors—by the continuance of instability of demand in a few countries and by a lack of synchronization between the rates of expansion of secondary industry, on the one hand, and of the agricultural and extractive industries on the other. In the remainder of this chapter and Chapter 3, these two factors are treated separately. Section 2 of this chapter compares the strength and stability of demand between different groups of countries ; section 3 and Chapter 3 discuss the progress of the various European industries. But it should be stressed that the two factors are connected ; if agricultural output could be raised, and the quantity of food thus increased, it would be easier for countries where industrial production is lagging to adopt an expansionist policy without fears that an increase in effective demand would lead to inflation.

2. The Expansion of Production in Different Countries

Northern and North-western Countries

In the countries of northern and north-western Europe, the rates of increase in industrial production since the war have been of the same order of magnitude. They have, moreover, been relatively constant from year to year. Even in the fourth quarter of 1950, when demand in the world as a whole was substantially higher than at any other time, the rate of increase of their output did not change appreciably.[1] This suggests, and the unemployment figures confirm, that there were, and had for several years been, no appreciable untapped reserves of manpower.

Industrial Production in Northern and North-western Europe

	1948 (1947 = 100)	*1949* (1948 = 100)	*1950* (1949 = 100)	*Fourth quarter 1950* (Fourth quarter 1949 = 100)	*1950* (Highest of years 1937-39 = 100)
Denmark	110	105	109	109	146
Finland .	114	107	102	95	145
Ireland	110	107	113	102	152
Netherlands .	119	112	110	111	125
Norway .	111	109	108	109	141
Sweden	106	105	105	107	151
United Kingdom .	111	107	109	111	140 [a]

[a] 1937 = 100

The post-war rise in industrial employment which accompanied the rise in production in these countries has thus been due to a rise in the proportion of the total working population engaged in industry rather than to absorption of large numbers of unemployed. In the United Kingdom the increase in the number of persons employed in industry between June 1948 and December 1950 actually exceeded the increase in the total civilian labour force ; 10 per cent of the increment went to the service trades and public admin-

[1] Finland is an exception to this, as to other generalizations : Finnish output, however, was kept down in 1950 by widespread strikes rather than by lack of demand.

Table 11

EMPLOYMENT IN INDUSTRY

Index numbers based on 1938 and 1948

Country	Percentage share of total in 1950	*1938 = 100*				*1948 = 100*							
						1949				1950			
		1947	1948	1949	1950 [a]	First quarter	Second quarter	Third quarter	Fourth quarter	First quarter	Second quarter	Third quarter	Fourth quarter [a]
Austria	2.2	121 [b]	139 [b]	154 [b]	163 [b]	105	109	112	115	115	116	118	121
Belgium	3.0	117 [b]	120 [b]	115 [b]	112 [b]	98	96	96	95	93	94	94	96
Czechoslovakia	5.1	98 [b]	104 [b]	108 [b]	117 [b]	104	103	104	107	..		..	.
Denmark [c]	1.3	134	141	145	156	98	102	102	105	107	113	108	116
Finland .	0.7	125	129	129	126	100	101	98	101	103	105	83	105
France .	13.7	106	109	111	112	102	102	102	102	102	102	102	103
Germany :													
western zones	17.3	89	100	108	114	108	108	108	110	109	111	118	119
West Berlin	0.6	61	59	51	46	98	89	78	78	73	74	80	85
Soviet Zone	7.2	98	99	98	..	..	..	..			..	..	.
Hungary	1.5	106	111	123	140	..			.	.	..	..	.
Ireland .	0.7	118	122	125	.	102	103	103	104	105	106	107	
Italy	7.5	105	105	104		98	99	100	97	96	97	99	
Netherlands	3.0	129	145	152	159	104	104	105	106	107	108	110	112
Norway .	1.2	132	143	149	153	103	104	104	105	106	106	107	108
Poland .	6.1	129 [d]	145 [d]	162 [d]	187 [d]	105	109	114	119	122	127	132	.
Sweden	2.5	130	132	133	134	101	101	100	101	102	102	100	102
Switzerland	2.3	148	151	142	138	97	95	93	92	91	90	91	94
United Kingdom	24.1	108	113	115	117	101	101	102	103	103	104	104	105
Total of countries listed	100.0	103	109	112	116	102	103	103	104	104	105	107	108

Sources and methods see Appendix B

NOTE — In general, the indices cover wage and salary earners in manufacturing (excluding building), mining and gas, water and electricity supply In some instances, indices based on numbers of wage earners only have been linked with indices of wage and salary earners

[a] Provisional

[b] 1937 = 100

[c] Quarterly index numbers for 1950 are based on man-hours worked.

[d] Current employment compared with 1938 employment in pre-war area

istration, employment in building decreased slightly, and there was a fall in the number of agricultural workers (though not in the output of agricultural produce). In the Scandinavian countries over the same period, the numbers employed in agriculture declined and the increase in the size of the service trades (apart from shipping in Norway) was, both absolutely and proportionately, less than the increase in industrial and building employment. In the Netherlands, none of the natural increase in the working population went into agriculture and only one-tenth into the service trades and public administration.

In all these countries the attractive power of manufacturing industry in a period of stable and high demand has proved strong enough to reverse the pre-war trend towards an increase in the relative size of so-called tertiary industries such as the distributive trades. It has also, it must be added, been strong enough in the United Kingdom to cause a chronic scarcity of coal miners which, until it is corrected, will continue to be a lurking danger to the stability of industrial production not only in the United Kingdom, but in other countries. The number of wage-earners in British coal mines fell at a steady rate of 3 per cent per annum from the beginning of 1949 until the late autumn of 1950.

Of the rise in industrial output in 1950 in this group of countries, one-quarter was due to an increase in employment, three-quarters to increased productivity. The magnitude of the rise in productivity seems to have taken Governments by surprise. Thus, the Government of the United Kingdom, taking the view that the improvements in efficiency in previous years were largely due to the elimination of bottlenecks and other once-and-for-all factors, forecast for 1950 a rise of 2½ per cent in total output per man-year ; [1] the increase actually achieved was of the order of

[1] See *Economic Survey for 1950*, para. 69, Cmd 7915, His Majesty's Stationery Office

5 per cent [1] and exceeded that of the previous year, which was itself considerably above the rate regarded as a normal average of boom and slump years before the war. The precise reasons for this accelerated progress remain mysterious ; only in a few cases is it possible to trace a direct connection between a particular investment scheme and a particular subsequent rise in productivity. But it is likely that one reason is the existence of full employment itself: when labour has become scarce, managements have every incentive to exercise ingenuity in economizing in its use.

The pressure of the demand for labour in countries with full employment has undoubtedly, by diminishing workers' fear of redundancy and reducing incentives to hard work, tended to raise the costs of production of particular industries. But in some instances this has merely meant that private cost has been brought nearer to social cost. Thus, it used to be traditional in most countries for building work to be concentrated in the summer ; the corollary of this was that the surplus workers of the summer became a charge on the community in the winter. In the United Kingdom, competition for labour has now made building employers reluctant to discharge workers ; the continued employment of the marginal workers has depressed output per man-hour below what it might otherwise have been, but, by encouraging builders to space out their work more evenly, has enabled the building industry to accomplish a given output with a smaller total labour force than it would otherwise have needed. In countries where the general pressure of demand is less strong (for example, Austria, Belgium, western Germany, Italy and even Denmark) building unemployment is still as violent as ever in its seasonal swings.

Industrial Production in Southern and Western Continental Europe (excluding Germany)

	1948 (1947 = 100)	*1949* (1948 = 100)	*1950* (1949 = 100)	*Fourth quarter 1950* (Fourth quarter 1949 = 100)	*1950* (Highest of years 1937-39 = 100)
Austria	159	135	118	115	142 *a*
Spain	100	102	114	110	144 *b*
Turkey	103	103	99	96	159 *c*
Belgium	108	102	103	115	97
France	117	109	103	108	112
Greece	109	119	126	132	104
Italy	106	105	114	115	98
Luxembourg	133	95	106	139	101
Portugal	105	93	106	115	115 *c*
Saar	137	124	106	114	88 *c*

a 1937 = 100
b 1940 = 100, production in that year was still abnormally low
c 1938 = 100

Southern and Western Continental Europe

This second group of countries is less homogeneous than the group discussed above, and no generalization will cover all its members.

In Austria, considerable industrialization took place during the war years, and even in 1947, when industrial output was not much above half the 1937 level, the number of persons employed in industry was one-fifth higher than in 1937. The capacity and manpower available were thus sufficient to permit a substantial increase over pre-Anschluss levels in the output of "civilian" goods once the immediate post-war dislocations had been overcome, should the demand be there. The 1937 level of output was, in fact, not reached again until towards the end of 1948; between then and the last quarter of 1950, output increased by another 50 per cent and, in the case of engineering products, was, by the end of the year, running at about double the 1937 rate. Agricultural output, on the other hand, was in the crop-year 1949/50 about 20 per cent below the level of the middle 'thirties. Even in the case of industry there still remains considerable room for further expansion, without investment in new capacity : average output per head in 1950, though 12 per cent higher than in the previous year, was not yet back to the pre-war level. Moreover, Austria has an appreciable reserve of unused manpower. The increase during the last two years in industrial employment seems to have been less than the fall in the numbers of workers employed in the building industry and the previously over-full service trades, and the number of unemployed at the end of 1950 was actually 50,000, or 40 per cent, greater than it had been a year earlier.

Turkey is another country where industrialization proceeded apace during the war. Since then, progress has slowed down appreciably and, in the first half of 1950, demand weakened sufficiently to cause an actual fall in industrial production. Agricultural output has in the past four years fluctuated about a level some few per cent above that of the average from 1934 to 1938.

[1] This corresponds to a figure of about 7½ per cent for industrial output

Of conditions in Spain little is known. There has been considerable expansion of electric generating capacity over the past decade, but Spain still remains one of the least electrified countries of western Europe. The textile industries seem to have expanded by about 50 per cent during the war years, after a fall in their output in 1949 there was a recovery in 1950. The output of superphosphate fertilizers, of which Spain is an important producer, was in 1950 still well below the pre-war level. More important, the net output of agriculture has, in the past four years, never risen above 93 per cent of the 1934-1938 average.

The other countries of the group resemble one another in certain obvious respects. In each there has been little or no growth of industrial output, on balance, between the late 'thirties and 1950 ; in the case of Belgium, there has even been a retrogression, and, if the comparison were between 1929 and 1950, the same would be true of France. Nor has agricultural output shown any increase ; in Portugal since the war it has hovered around the levels of the 'thirties, in France and Italy the 1934-1938 level was reached only in the last two crop-years ; in Greece even the 1950 output – the highest since the war – was 10 to 15 per cent below the 1934-1938 level.

Moreover, although all these countries have made considerable industrial progress since the low levels current at the end of the war, this progress has been achieved only in fits and starts ; what has been gained in one year has sometimes been almost, and occasionally quite, lost in the next. Thus, the initial post-war recovery of Italian production came to an early end in mid-1947,[1] when about 15 per cent of the non-agricultural labour force was still unemployed. There followed a period of relative stagnation. Not until 1950 did industrial production start to rise again at all generally. Over the whole period, excess industrial capacity in Italy has remained considerable ; official estimates put the increase in engineering capacity between 1938 and 1950 at 20 per cent : engineering production has at no time since the war been less than 13 per cent below the 1938 output of civilian goods and armaments. Italian output of rayon yarn and staple fibre was in 1950 still less than it had been in 1938 ; whereas Italy had contributed a quarter of total European output before the war, by 1950 its share had fallen to one-eighth.

In France, Belgium and Luxembourg, the post-war recovery was less short-winded.[1] Its speed slackened in Belgium from mid-1947 onwards, and in France it was interrupted by strikes from time to time, but it was not until 1949 that the curve of production flattened out in France and actually turned downwards in Belgium and Luxembourg. This halting of progress coincided with the United States recession ; the subsequent revival of United States demand, however, brought no sympathetic recovery of Belgian and French production, and it was not until the fourth quarter of 1950 that industrial output again turned upwards in these countries. During the first three quarters of the year there was an actual contraction of activity compared with the same period of 1949.

This contraction was not common to all industries. In France, the output of textiles expanded and the volume of exports of wool cloth increased, the newer petrol-refining and rubber industries grew rapidly, paper production increased, the amount of electric power generated increased (thanks to a plentiful rain supply), and there was some recovery in the output of building materials. In Belgium, too, most consumers' goods industries – and notably the textile, paper and glass industries – increased their output ; Belgian exports of these products expanded as western Germany entered world markets as a buyer again ; moreover, the Benelux Agreement and the removal of discrimination against Belgian goods by some countries – for example Australia – opened up new markets for Belgian output.

In both France and Belgium, as also in Switzerland and Italy, depression was concentrated in the capital goods industries. In Italy, the output of motor vehicles increased by more than 50 per cent or rather more than the European average ; the output of diesel engines, machine tools, textile machinery and tractors, however, was lower than in 1949, the output of electric motors and railway rolling-stock – already falling in 1949 – continued to decline, and the shipbuilding industry was operating well below capacity. In Belgium, the output of engineering products, which had amounted to 402,000 tons[2] a quarter in the first half of 1949, averaged only 333,000 tons in the first three quarters of 1950. In France, engineering output was over 10 per cent below the previous year's level until the

[1] See Chart 8.

[2] For details, see Table 20.

last quarter of the year. As a result, the monthly consumption of steel in France fell from 560,000 tons in the first half of 1949 to 410,000 tons in 1950 ; this, in turn, depressed activity in the Belgian and Luxembourg steel industries and led to a reduction in French coal output.

Even after the dramatic change in the tempo of activity that followed Government decisions to increase defence expenditure, the French and Belgian engineering industries took some time to recover, and in the fourth quarter of 1950 their rate of output was still below that reached two years before. Because productivity had risen in the meantime, total industrial employment was, at the end of 1950, actually lower than it had been in 1947. Only in the early months of 1951 did the boom really get under way.

The fluctuations in industrial activity in these five countries, although resembling one another in type, have differed appreciably in amplitude and timing, and cannot be traced to a single exogenous factor working on all three economies. In the case of Belgium, fluctuations in production have been primarily due to uncompensated fluctuations in foreign demand. In the case of France and Italy, hesitancies of domestic demand not offset, and sometimes induced, by Government policies have been more important. Thus, the setback to Italian production in the second half of 1947 had its origin in an endeavour by managements to reduce work in progress ; this in turn was directly traceable to the adoption of a restrictive credit policy by the Italian Government. Only when the Government, in 1950, adopted a policy of subsidizing house-construction on a bigger scale than hitherto did the curve of industrial production start to rise again. The fall in France's production in the first half of 1950 was caused by a sharp decline in fixed investment almost wholly attributable to a reduction of the credits to the nationalized industries. The simultaneous reduction, for purely financial reasons, of these industries' stocks of coal both contributed to a weakening of demand and made the subsequent recovery more laborious than it need have been. The Governments of all these countries have, from time to time, been inhibited by an easily comprehensible fear of inflation from allowing or encouraging investment in plant, machinery and stocks to reach a level at which excess capacity in the metal-using industries would be eliminated.

Western Germany

Western Germany, which in 1938 produced 20 per cent of Europe's industrial output and in 1947 only 8 per cent, provided 15 per cent in 1950 and 17 per cent in the last quarter of the year.

The recovery from the trough of 1947 has been by no means evenly spread over time. In 1948, as a result of the impact effect of the monetary reform, the pace was dramatically fast ; in 1949 there was some slowing-down, so that at the beginning of 1950 industrial production was running at a rate only one-seventh higher than a year earlier and was still 18 per cent below the 1938 level ; by the end of 1950, production had risen by one-third and seems, after rough correction for seasonal variations, to have been just above the 1938 annual rate. Both building activity and agricultural output still remain well below the immediate pre-war levels.

Both the flattening of the curve of industrial production in 1949 and its renewed acceleration in 1950 were mainly the reflection of changes in the rate of growth of the output of the heavy industries—steel, engineering and chemicals. The output of textiles has increased steadily over the whole period since 1947. The absolute increase in the output of the engineering industries, on the other hand, during 1949 was only half what it had been in 1948, and in 1950 was more than twice as great as in 1949. The same was true of the output of crude steel.

The acceleration of recovery in 1950 was accompanied by a rise in investment in fixed capital by industry. However, the greater part of the increased output was for export : western German investment in machine tools remained at about the 1949 level in both halves of 1950, and investment in commercial vehicles even declined somewhat in 1950, but production for export was in both cases at about seven times the 1949 rate in the second half of 1950. In other cases—for example, tractors and motor cars—the home market took an increased share of the output in the second half of the year, but in the first six months half of the increased output was exported.[1] The following table demonstrates the importance of this lively export demand in setting off the general recovery.

[1] For details, see Table 20.

Quarterly Increments of Western German Industrial Production and Exports in 1950
(excess over previous quarter expressed in millions of Deutschmark at prices of fourth quarter 1949)

	First quarter	*Second quarter*	*Third quarter*	*Fourth quarter*
Industrial production	110	655	750	1,190
Industrial exports	240	370	430	580

But by the second half of the year, a second stimulus (and one resulting from a Government decision) was already at work. The construction of new houses began in the spring on a scale more than sufficient to outweigh the earlier decline in building repair work and steadily expanded. In each quarter of 1950 the number of man-hours spent on new housing was about double that of the previous year. The index of building activity as a whole was in 1950 about 15 per cent higher than in 1949 ; moreover, a given amount of building employment generates, directly or indirectly, more income if it is concentrated on new work, which has a high ratio of gross to net output, than if it is mainly in repair work.

Millions of Man-hours spent on Construction of New Dwellings in Western Germany [a]

	First quarter	*Second quarter*	*Third quarter*	*Fourth quarter*
1949	20	32	51	59
1950	40	72	100	90

[a] The figures cover all firms employing 20 or more workers and are adjusted for changes in the scope of the statistics

Western Germany thus had considerable achievements to its credit at the end of 1950. Industrial production had been tripled in three years, export markets had been regained, industries formerly concentrated in eastern Germany had, since the practical cessation of trade between the two halves of Germany, been successfully built up in the west—for example, electrical engineering, optical instruments, book publishing.

But the ground lost in 1949, when unemployment had been allowed to rise from three-quarters of a million to one and a-half million, had not, in one sense, been recovered. The number of persons employed in industry, handicrafts and building rose by about 600,000 during 1950, while the labour force increased by 740,000.

Moreover, by the end of the year, certain weaknesses in the foundations of recovery had become apparent. As a result of a balance-of-payments crisis, the likelihood of restrictions on imports was growing ; as a result of power cuts, short-time working was increasing ; and, as a result of the shortage of coal, steel and a number of chemicals were becoming scarce. It is clear that this situation was bound to arise sooner or later. In 1948, all branches of activity were depressed to roughly the same extent. Since then, the general index of industrial production has doubled and engineering output nearly tripled ; the production of hard coal has risen by only one-third. Western Germany, even more than other countries in Europe, is suffering from a lack of synchronization between the rates of expansion of the various sectors of its industry, which Government investment policy has so far done nothing to correct. Until the conditions for an expansion of the output of coal have been created, the expansion of western German output is likely to be permanently hamstrung, and unemployment, excess capacity and low productivity are bound to exist side by side.

Eastern Europe

The industrial production of eastern Europe as a whole was, in 1950, 22 per cent greater than in 1949. More than one-third of the extra output was produced in eastern Germany, which, by the end of the year, was just about back to its pre-war rate of production

Industrial Production in Eastern Europe

	1948 (1947 = 100)	*1949* (1948 = 100)	*1950* (1949 = 100)	*1950* (1938 = 100)
Bulgaria	121	130	123	280
Czechoslovakia	118	115	116	147[a]
Germany, Soviet Zone	126	120	126	91
Hungary	143	142	135	207
Poland	137	122	122	
Rumania	151	140	137	160
Yugoslavia	153	117	106	316

[a] 1937 = 100

In Yugoslavia, progress in 1950 was small · investment projects continued to be held up for lack of the capital goods that it had been hoped, until 1948, to obtain from the Cominform countries ; there was, moreover, some tendency for industrial workers to return to the countryside, where the food shortage caused by a disastrous drought was less severe.

The rates of increase of production achieved by the other countries were rather less widely dispersed about a high average than in previous years, but still differed appreciably from one another. The industrial composition of the increases also varied from country to country. In Czechoslovakia, the increase in the output

of heavy industry (16 per cent) was greater than that recorded for light industry (11 per cent); in Poland it was less (19 per cent as compared with 27 per cent); and in Hungary both types of industry increased at about the same rate (35 per cent).

Part of the increase in the output of light industry was, however, achieved at the expense of the formerly important but recently rapidly dwindling handicraft trades: thus in Poland, where the factory production of clothing increased more than the output of textiles, it is likely that there was a decline in bespoke tailoring which is not directly reflected in the official records.

Within the heavy industries, the production of engineering goods rose more in 1950 than the output of fuel and basic materials;[1] in this respect eastern and western Europe had similar experiences. Some increase in the ratio of engineering output of basic materials was to be expected, as the production of goods involving a high degree of fabrication was introduced into relatively undeveloped economies, but there is evidence that the output of the basic industries fell behind more than was intended. There appears to have been a shortage of solid fuels in all the eastern countries; in Bulgaria the drought caused a shortfall of electricity, in all eastern European countries there were breakdowns to electricity generators as a result of too intensive use, and production of oil everywhere fell behind plan. In the case of commodities imported from overseas, the difficulties which arose in the second half of the year were of the same kind as those experienced in western Europe; the eastern European countries, however, have a smaller margin for economy in their use as their imports had already been reduced to a minimum. In the field of industrial materials, the greatest gain in 1950 was probably the substantial recovery of eastern German production of chemicals and fertilizers; this was important not only to eastern Germany, but to its neighbours.

Until 1950, the general rate of expansion was so great that substantial changes in the pattern of industry could be made without actually reducing the output of any particular sector of industry. But in 1950 the output of some consumers' goods fell slightly in Hungary and the production of the important Czechoslovak leather and rubber industries was lower than in 1949; it is not clear whether this last reduction was due to shortages of materials or to reorganization of the industries. In both the rubber and the glass industries of Czechoslovakia there was some switch of production from consumers' goods to intermediate goods for use in industry.

Early in 1950, the long-term plans previously published in the various countries were revised; there was a general shift of emphasis towards the heavy industries. In particular, higher targets were set for the coal-mining and heavy engineering industries of Czechoslovakia.

The increase during 1950 in the number of persons employed in the nationalized sectors of the eastern economies may be estimated at about 1½ million, of whom 700,000 went into industrial employment. Over one-third of the increase represented the annual increase in the population of working age; a part of the remainder represented merely a transfer of workers from the private to the nationalized sectors of the economy (particularly in the case of building operatives and distributive workers); there is also evidence that, as the result of changed social conditions and improved opportunities of employment in industry, the average number of earners per family increased during the year. Except in Czechoslovakia there has also been—as might be expected—a significant movement of workers from agriculture. During 1950, shortages of labour, particularly of miners and skilled engineers, developed. In Hungary, restrictions on the movement of workers from the nationalized to the private sector of the economy were introduced and exceptional privileges were offered to miners; efforts were also made to induce workers partly engaged in agriculture to sell their holdings.

Increases in productivity were highest in the engineering and chemical industries and in the light industries, where factory production took the place of handicraft work. In addition, efforts have been made to break down restrictive practices on the side of labour, and there has been a general tendency to introduce methods of wage payment that give greater incentives to production than those previously in vogue.

The Soviet Union

Industrial production in the Soviet Union increased by 23 per cent in 1950 and reached a level 73 per cent higher than in 1940 and 17 per cent higher than was contemplated when the first post-war Five-year Plan

[1] For details, see Appendix A, Table XXV.

Table 12

INDUSTRIAL PRODUCTION IN THE U.S.S.R.

Quantities and index numbers

Commodity	Units	Actual Production in Physical Quantities					Planned production 1950	Actual Production — Index Numbers			
		1937	1940	1948	1949	1950		1948 (1947 = 100)	1949 (1948 = 100)	1950 (1949 = 100)	1950 (1940 = 100)
Energy											
Coal and lignite	Million tons	128	166	207	234	260	250	114	113	111	157
Crude petroleum	Million tons	29	31 0	29.4	33 5	37.8	35 4	113	114	113	122
Electric power	Billion kWh	36	48 2	66	78	90	82	116	118	116	187
Metals and metal products											
Pig-iron	Million tons	14.5	15 0	14	16.6	19.4	19 5	122	119	117	129
Crude steel	Million tons	17.7	18.3	18.6	23 3	27.3	25 4	128	125	117	149
Rolled steel products	Million tons	13	13.1	14	17.9	20 8	17.8	128	127	116	159
Copper	Thousand tons	97.5	161	195	235	255	225	120	120	110	159
Engineering products											
Equipment for iron and steel mills	Thousand tons	32 [a]	28	95	120	134	103	194	127	112	480
Metal-working machine tools	Thousands	36	50				74	.	119	112	
Steam locomotives	Number	1,581	917	..	..	.	2,200	153	115	..	
Wagons	Thousand 2-axle	59	47	.	.	..	146	145	147	117	.
Tractors	Thousands	51	31.1				112				
	Thousand 15-BHP	79	.	..	150	180	..	204	155	123	380
Combine harvesters	Thousands		13	14	29	46	.	510	201	159	360
Electric motors : up to 100 kW	Thousands		.	.	.		624	152	134	120	300
over 100 kW	Thousands	..	.		..	..	9	139	137	120	500
Chemicals											
Mineral fertilizers	Thousand tons		2,608	.	..	5,100	5,100	143	131	119	200
Synthetic dyes	Thousand tons	35 [a]	.	.	..	.	43	.	112	109	
Soap	Thousand tons	495		.	.		870	145	170	111	116
Building materials											
Cement	Million tons	5.5	5 8	6 4	8.1	10 2	10 5	137	126	126	176
Window glass	Thousand tons	60 [a]	44.4	66 8	79 5	84.3	80 0	120	119	106	190
Timber and paper											
Haulage of timber	Million cubic metres	111	119	134	154	162	190	133	115	105	136
Paper	Thousand tons	831	812	836	995	1,194	1,340	120	119	120	147
Light industry											
Cotton fabrics	Million metres	3,442	3,886	3,098	3,532	3,815	4,686	124	114	118	98
Woollen fabrics	Million metres	105	120	136	162	167	159.4	128	119	103	139
Silk fabrics	Million metres	58	69.5	80	102	125	141	..	128	123	180
Leather shoes	Million pairs	164	205	135	165	205	240	123	122	124	100
Food products											
Butter	Thousand tons	185	207	285	303	325	275	137	106	107	157
Vegetable oils	Thousand tons	495	..	..	.	.	880	133	132	114	110 [b]
Sugar	Million tons	2,421	2,150	1,663	2,045	2,515	2,400	170	123	123	117

Sources see Appendix B

NOTE — Estimates of actual production in the year 1948 and 1950, and some of the estimates for 1940, have been obtained by applying published figures of percentage changes in production to published quantities for a particular year, or by comparing actual with planned production. In the case of steel, however, this procedure involves certain difficulties and an alternative interpretation of public announcements would suggest a figure of about 25 million tons for ingot production in that year

[a] 1938

[b] Including other edible fats

was launched in 1945. Employment in industry was 16 per cent above the target level.

Indices of Industrial Production in the U.S.S.R.

	1948	1949	1950	1948	1949	1950
	(Corresponding period of previous year = 100)			(1940 = 100)		
First quarter	132	123	122	109	134	163
Second quarter	124	120	121	112	135	163
Third quarter	123	117	124	121	141	174
Fourth quarter	128	120	125	128	159	191
Year	127	120	123	118	141	173

Total production of energy was, in 1950, 11 to 12 per cent greater than in 1949; timber production was up by 5 per cent, and the output of steel by 17 per cent. Increases greater than the average were achieved in the case of motor vehicles, agricultural machinery, some types of industrial machinery, some branches of the food-processing and drink industries and a number of individual items such as cameras.[1]

As compared with 1940, the output of coal was up by 57 per cent; a larger proportion of the total was brown coal and lignite, however. The output of petroleum was up by only 22 per cent. The production of pig-iron was 29 per cent greater than in 1940; the increases in the output of crude steel and rolled steel products were 49 and 59 per cent respectively. These three figures, taken together, suggest that, as in western Europe, there has been a considerable increase in the proportion of scrap consumed since 1940.

The biggest increases in production since 1940 have been in the field of engineering; total engineering output was in 1950 up by 130 per cent and the output of some products (for example, metallurgical equipment, electrical equipment, agricultural machinery, oil equipment, steam turbines) has increased by more than this average. Even if the comparison is made with 1937, when the output of civilian metal goods was greater than in 1940, a doubling of the output of tractors and motor vehicles is shown. The output of fertilizers was, in 1950, 100 per cent greater than in 1940; the output of glass had increased by 90 per cent and of cement by 76 per cent.

A comparison of actual 1950 outputs with the targets set in 1945 shows that, on the whole, in the capital goods industries the Plan was considerably over-fulfilled — most noticeably in the engineering industries, less so in the iron and steel industry. The output of coal and oil, however, was not greatly above the planned levels, and in the case of timber there was a considerable under-fulfilment of the Plan. As a result of this last failure, steps were taken in 1950 to mechanize timber production, and the system of wage-payment was changed so as to increase incentives to raise productivity.

Expansion of the consumers' goods industries during the five years of the Plan was smaller. Between 1940 and 1950 the total output of the textiles, clothing, footwear and other light industries increased by only 17 per cent. Distinct progress was made in the wool and rayon industries; the output of cotton textiles and of boots and shoes, on the other hand, seems to have been below target levels and no greater than in 1940. Some of the food-processing industries showed increases; thus, the output of factory butter rose by 57 per cent, the output of sugar by 17 per cent, the output of tinned food by 47 per cent. But these increases were not, except in the case of sugar, paralleled by any similar increases in the output of agricultural produce, the raw material of these trades.

The Five-year Plan had called for an increase in agricultural production of 20 per cent over the 1940 level by 1945: this was not achieved. In 1950 the cotton crop, for the first time since the Plan was

[1] For further details, see Appendix A, Table XXV.

Table 13

End of year — LIVESTOCK NUMBERS IN THE U.S.S.R. — *Millions*

Type of livestock	Total					In collective ownership [a]		
	1928	1937		1945	1950	1937	1940	1950
		Pre-war boundaries	Post-war boundaries					
Horses	33.5	16.2	20.5	10.5	13.7	12.5	..	..
Cattle	70.5	50.9	58.9	46.9	57 2	14.8	20.1	27.7
of which cows		22 7	.	..	24 2	4 2		.
Sheep and goats	146.7	66.7	91.6	69 4	99.0	22.8	41.9	69.1
Pigs	26.0	25.8	27.5	10.4	24.1	6 3	8.2	12.7

Sources see Appendix B

[a] Excluding animals in collective ownership on State farms

formulated, was a good one, and the output of cotton, at 3.7 million tons (1 million tons higher than in 1940), was substantially and production of sugar-beet at 27.2 million tons slightly, above the planned levels. But grain production, though 5 million tons higher than the good harvest of 1940, was slightly below what had been planned : the increase in the acreage under grain as compared with 1949 was offset by a reduction in yields due to drought. Livestock numbers increased less rapidly than crop production, and the numbers of cattle and pigs at the end of 1950 were substantially below what had been intended.

The number of persons employed " in the national economy " increased in 1950 by a further 2 millions, bringing the total up to 39.2 millions, of whom about nine-tenths were in non-agricultural employment. This was above the planned figure. The recruitment of trained apprentices into industry, on the other hand, has fallen seriously behind schedule, as the following figures indicate :

Number of Trained Apprentices entering Employment in Industry, Building and Transport (thousands)

	Actual	*Planned*
1946	382	380
1947	790	790
1948	1,000	980
1949	723	1,090
1950	494	1,250
Total	3,390	4,500

Sources Five-year Plan and annual reports on the fulfilment of the Plan

Industrial employment increased by 6 per cent in 1950, and productivity by 12 per cent. The total increase in industrial productivity since 1940 has been 37 per cent. As in western countries, the improvement has been greatest in the engineering industries and least in the basic industries.

The centre of gravity of Soviet industry has for the past fifteen years been steadily shifting away from the western regions of European Russia to the previously partially unpopulated areas around the Urals and in Asia. This tendency was accentuated during the war. The following table gives the estimated production of a few basic industrial materials in the east and the west :

Estimated Production in the U.S.S.R. (million tons)

	Western regions		Eastern regions		Total	
	Pre-war [a]	*1950*	*Pre-war* [a]	*1950*	*Pre-war* [a]	*1950*
Coal and lignite	94 [b]	137 [b]	34 [c]	123 [c]	128	260
Oil	27 [d]	21 3	2	16 7	29	38
Pig-iron	10 6	10 9	4 4	8 5	15	19 4
Crude steel	12 1	14	6 2	13 3	18 3	27 3

[a] Coal and oil, 1937 ; iron and steel, 1940

[b] The geographical distribution of production in the western regions was as follows

	Donbass	Moscow	North
1937	75	8	
1950	90	25	15

[c] In both years production was about equally divided between Kuznets and other coalfields

[d] Of this Baku contributed 21

In the case of coal, two-thirds of the increase since 1937 has been due to expansion in the eastern regions. Oil production increased by more than one-quarter between 1937 and 1950, in spite of an actual fall in production at Baku, which before the war provided more than two-thirds of the total ; in the case of iron and steel, almost the whole increase since 1940 is accounted for by the eastern regions. In the eastern regions, both coal and iron are produced in relatively shallow mines or by opencast methods. Investment per worker in these regions is considerably higher than in the west and, of course, equipment is more up to date. Consequently, the productivity of labour is very high (in some coal-fields 80 per cent higher than in the Donetz basin and in the pig-iron plant at Magnitogorsk four times as high as in some of the southern Russian plants), and costs of production are lower than in the west in spite of the enormously higher transport costs (the distance between coal and iron is about 2,300 kilometres) In the case of oil, on the other hand, costs of production in the new fields are higher than in the west, but there is an offsetting saving in transport costs.[1]

[1] *Cf* R Livshitz · " Regional differences in labour productivity and production costs in Soviet industry ", *Voprosy Ekonomiky, No. 6, 1950.*

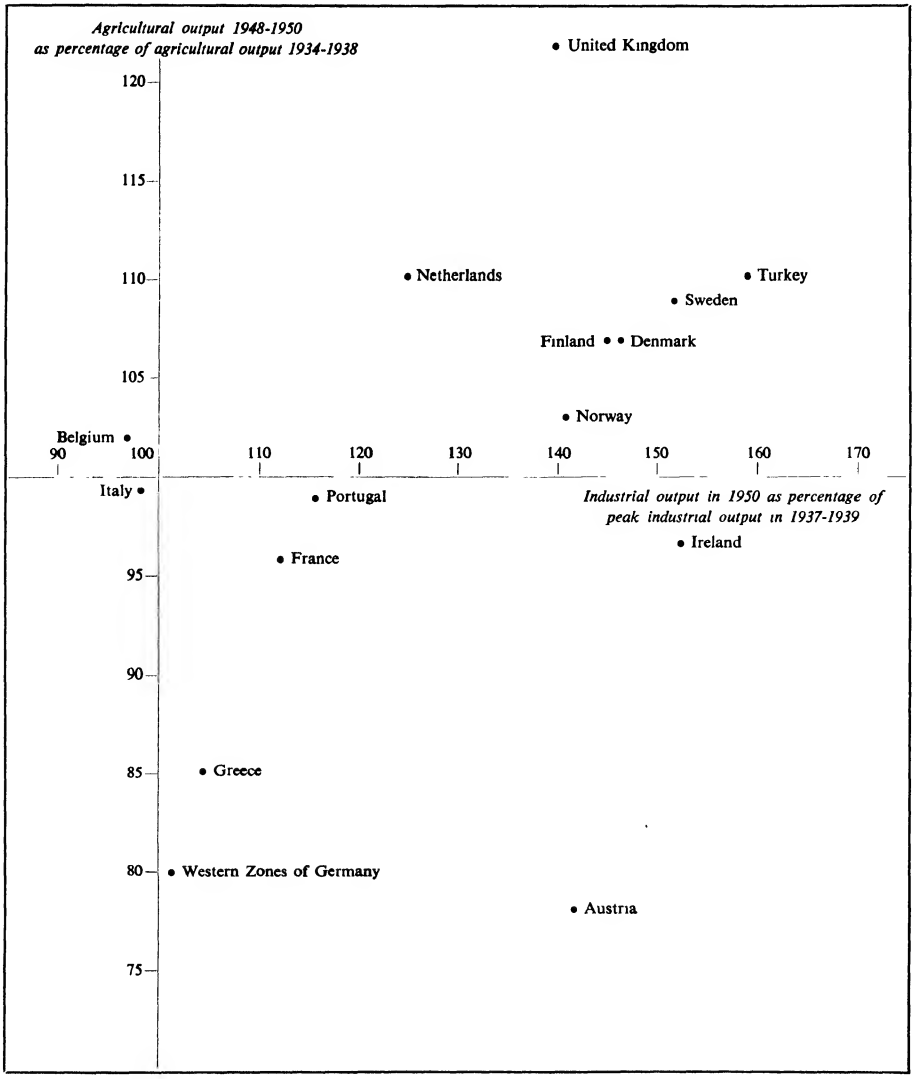
3. The Expansion of Production in Different Industries

Agriculture

In the last complete agricultural year, 1949/50, the net output of European agriculture was still 7 per cent below the average of the five years immediately preceding the war. As Table 14 shows, the experiences of individual countries have varied widely. In the planned economies of eastern Europe, production in 1949/50 was still well below the 1934-38 average, reflecting the emphasis given in the plans to the development of industry. In the rest of Europe there has been a marked tendency for industrial progress and expansion of agricultural output to be associated. In France, Greece, Italy, Portugal and western

Chart 4

RELATION BETWEEN AGRICULTURAL AND INDUSTRIAL OUTPUT OF INDIVIDUAL COUNTRIES



Sources. See Appendix B.

Table 14

INDEX NUMBERS OF AGRICULTURAL PRODUCTION

Country	Percentage share [a] of total in 1949/50	*1934–1938 = 100*			
		1946/47	1947/48	1948/49	1949/50 [b]
Austria	1.6	70	71	75	81
Belgium-Luxembourg	2.1	84	86	92	112
Bulgaria	1.5	72	70	87	..
Czechoslovakia	3.5	84	66	76	81
Denmark	2.5	97	90	97	117
Finland	1.1	75	87	106	108
France	16.4	82	77	96	96
Germany : western zones	8.6	69	64	77	84
Soviet Zone	3 7	67	58	74	71
Greece	2.3	72	89	83	87
Hungary	3.1	60	64	98	94
Ireland	1.3	100	92	97	97
Italy	11.1	85	89	97	102
Netherlands	3.1	87	88	104	117
Norway	0.7	98	91	100	106
Poland	7.9	..	62	65	71
Portugal	1 6	99	109	95	101
Rumania	3.1	53	80	91	..
Spain	5.1	88	93	83	90
Sweden	2.3	104	100	109	109
Switzerland	1.4	107	101	110	99
Turkey	4.9	110	103	118	102
United Kingdom	7.7	117	108	124	121
Yugoslavia	3.4	57	79	93	96
Total Europe (excluding U.S.S R.)	100	81	80	91	93

Sources The index numbers for individual countries have been supplied by the Food and Agriculture Organization of the United Nations For weighting system and methods of calculation of European indices, see Appendix B

NOTE — The indices relate post-war production in post-war territory to pre-war production in post-war territory The figures relate to agricultural years, i e, the period July-June They include the staple crops harvested in the first year mentioned The index numbers differ in many instances from those published by individual countries For details and a comparison with official indices, see Appendix B

a The figures in this column were obtained by applying the volume indices shown for 1949/50 (1934-1938 = 100) to pre-war weights which are proportional to net output They take no account, therefore, of shifts in relative prices since 1938

b Provisional.

Germany—all countries whose industrial output in 1950 was not greatly above, and in some instances actually below, the peak level of the late 'thirties—agricultural output in the last two complete crop-years averaged rather less than the 1934-38 level. The countries where industrial production has considerably (and, as earlier discussion has shown, steadily) expanded since the 'thirties, on the other hand, have also succeeded in raising their agricultural output above pre-war levels ; [1] even before the war the farming industries of some of these countries—Denmark, the Netherlands, the United Kingdom—were already among the most highly capitalized in the world ; since the war their new investment has been greater, in relation to farming population, than elsewhere,[2] and their tractor densities, already in 1938 among the highest in Europe, have increased by more than the European average.[3]

Until the devaluation of European currencies in 1949, prices paid to farmers in Europe were in general above world prices. Devaluation, however, by raising European import prices, made European farm prices competitive in most of the devaluing countries (for example, Belgium, the Netherlands, Norway, Sweden, the United Kingdom) ; in the case of livestock, European prices actually became, in spite of rises in the prices of imported feeding-stuffs, lower than world prices. As long as this situation lasts it is more than ever likely that European Governments will endeavour

[1] For details see Chart 4, where indices of industrial activity are plotted against indices of agricultural output.

[2] See Table 24.

[3] See Appendix A, Table XXXIII.

Table 15

NUMBERS OF CATTLE AND PIGS

Thousand head

Country	Cattle				Pigs			
	1938/39 [a]	1948/49	1949/50	1950/51	1938/39 [a]	1948/49	1949/50	1950/51
Austria	2,620	2,108	2,203	2,240	2,830	1,618	1,724	1,923
Belgium	1,600	1,688	1,902	2,000	856	658	1,100	1,360
Bulgaria	1,512	2,080	2,130	2,140	752	1,210	1,320	1,500
Czechoslovakia	4,376	3,663	4,000	4,100	3,538	3,242	3,600	3,700
Denmark	3,326	2,915	3,044	3,050	3,183	2,400	2,679	3,100
Finland	1,767	1,517	1,700	1,700	473	403	410	475
France	15,622	15,434	15,432	16,800	7,127	6,288	6,727	8,000
Germany western zones	12,252	10,571	11,000	11,500	12,452	6,758	9,698	11,890
Soviet Zone	3,758		3,000	3,300	6,833	.	4,300	5,700
Greece	974	700	678	762	430	485	530	550
Hungary	2,372	1,626	2,159	2,100	3,886	3,600	4,350	4,350
Ireland	4,057	3,948	4,324	4,200	931	550	675	750
Italy	7,590	7,800	7,800	8,000	3,264	3,757	3,800	4,000
Luxembourg	107	120	119	116	155	120	106	115
Netherlands	2,817	2,440	2,544	2,640	1,553	871	1,298	1,860
Norway	1,455	1,230	1,222	1,250	362	275	412	450
Poland	9,924	6,300	6,800	6,900	9,684	5,900	6,100	8,100
Portugal	905	900	1,050	1,100	1,206	1,000	1,140	1,200
Rumania	3,494	4,500	4,600	4,950	2,296	2,000	2,000	2,300
Spain	3,738	4,000	4,100	4,200	6,942	5,300	5,600	5,800
Sweden	2,975	2,667	2,656	2,625	1,316	1,375	1,232	1,300
Switzerland	1,711	1,440	1,478	1,510	880	800	887	900
United Kingdom	8,872	10,000	10,229	10,639	4,394	3,280	3,260	3,500
Yugoslavia	4,302	4,400	5,400	5,300	3,542	4,500	4,700	4,700
Turkey	9,311	10,279	10,351	10,580	3	5	2	3
Total of countries listed (excluding U.S.S.R)	111,437	105,400	109,900	113,700	78,888	58,700	67,700	77,500

Sources see Appendix B

NOTE — The date of enumeration of livestock numbers differs from country to country However, the figures for the same country relate to the same dates for all years, so that, although the totals do not represent the total European stocks of cattle and pigs at any one time, they give a good indication of the movement of those stocks from year to year

[a] Or nearest period for which figures are available

to expand domestic output of meat and other animal products. The United Kingdom Government's decision in March 1951 to raise the farm prices of meat and wool substantially, while leaving other farm prices more or less unchanged, is symptomatic in this connection.

In 1950, all but a few countries increased their stock of both cattle and pigs ; [1] more than one-third of the increase in numbers of cattle occurred in France, where herds in 1949 were already nearly up to the 1934-38 average ; the biggest increases in pig populations were achieved by Poland (33 per cent) and western Germany (22 per cent). The rise of 3 to 4 per cent in European herds of cattle occurred, even though there was no net rise in imports of feeding-stuffs (a rise in the United Kingdom's imports being offset by a fall in western Germany's imports) and a small fall in European production of coarse grains. As compared with 1934-38, the number of cattle in 1950 was up by about 2 per cent, although the coarse grain harvest was down by about 10 per cent and imports of feeding-stuffs were also down. During the last decade there has been something like a revolution in farming methods in some countries, which is evidently now spreading to others. To a large extent, permanent grassland has given place to cultivated grass with

[1] For details, see Table 15

Table 16

PRODUCTION OF MEAT AND MILK

Thousands of tons

Country	Meat [a]			Milk		
	1934-1938 [b]	1949	1950 [c]	1934-1938 [b]	1949	1950 [d]
Austria	276	137	185	2,540	1,748	1,950
Belgium	327	275	300	2,834	2,870	
Czechoslovakia	459	306		4,430	2,618	
Denmark	448	391	482	5,270	4,884	5,400
Finland	108	113	130	2,589	2,100	
France	1,720	1,865	1,980	12,936	11,276	14,560
Germany : western zones	1,925	1,135	1,482 [e]	15,019	11,316	13,862
Soviet Zone	773	443				
Hungary	427	.		1,536	1,100	
Ireland	177	156	167	2,300	2,302	
Italy	670	578	610	6,474	5,557	
Netherlands	380	277	368	5,121	5,354	5,723
Norway	104	90	102	1,330	1,545	1,730
Poland	1,168	850		10,425	5,250	
Spain	617	520	530	1,810		
Sweden	302	294	303	4,596	4,695	5,000
Switzerland	200	173	180	2,655	2,409	2,560
Turkey	388	321	.	2,304	1,988	
United Kingdom	1,389	1,046	1,200	8,345	9,759	10,600
Yugoslavia	389	..	.	2,503		
Other European countries	750	600		4,670		
Total Europe (excluding U S S.R.)	13,000	10,100	11,600	105,000	89,000	.

Sources see Appendix B

Note — Pre-war figures relate to post-war boundaries

[a] In terms of carcass weight, excluding poultry but including offal Bacon is included. See Appendix B

[b] Or nearest period for which figures are available

[c] Provisional

[d] For certain countries it has been necessary to estimate total milk production in 1950 on the basis of monthly data which sometimes relate only to a part of the total production See Appendix B

[e] 1949/50

Table 17

PRODUCTION OF MAJOR AGRICULTURAL CROPS BY REGIONS

Millions of tons

	Bread Grain			Coarse Grain			Sugar Beet [a]			Potatoes		
	1934–1938	1949/50	1950/51	1934–1938	1949/50	1950/51	1934–1938	1949/50	1950/51	1934–1938	1949/50	1950/51
Eastern Europe [b]	26 35	25.02	24 12	25.97	22 60	21.09	2.66	2 54	3.29	67.4	52 6	54.8
Western Europe [c]	21.25	21.83	21.37	22 02	22 54	21.88	3.20	3.52	4.84	58.1	57.9	68 8
Southern Europe [d]	17.78	14.35	18.01	11.25	8 52	9.77	0 71	0 80	0.91	8 5	7.1	7 4
Total Europe (excluding U.S.S.R.)	65.38	61.20	63.50	59.24	53.66	52 75	6.57	6.86	9.04	134 0	117.7	131.0

Source: Food and Agricultural Statistics, Food and Agriculture Organization of the United Nations, and *Sugar*, C Czarnikow, Ltd , London

Note — "Bread grain" consists of wheat and rye "Coarse grain" includes barley and oats in all instances, maize in the case of major producing countries and mixed grain in the case of Denmark, the four zones of occupation of Germany, Norway, Sweden and Yugoslavia All figures relate to the agricultural year, i e , the period July-June, and include crops harvested in the first year mentioned

[a] Raw sugar equivalent

[b] Albania, Bulgaria, Czechoslovakia, Finland, Soviet Zone of Germany, Hungary, Poland, Rumania and Yugoslavia

[c] Austria, Belgium, Denmark, France, western zones of Germany, Ireland, Luxembourg, Netherlands, Norway, Sweden, Switzerland and the United Kingdom

[d] Greece, Italy, Portugal, Spain and Turkey.

yields greatly increased by the application of fertilizers, and hay has been increasingly replaced by artificially dried grass and silage. A stimulus to the spread of these new techniques no doubt was, and continues to be, the rise in the price of imported feeding-stuffs as compared with that of domestically produced fertilizers.

The great increase in livestock production during 1950 made possible rises in the output of meat in all the countries for which figures are available.[1] The increases registered in individual countries were widely dispersed about the average : western Germany, with a rise of 30 per cent, was responsible for one-third in the total increase ; there was also a big rise, 15 per cent, in the United Kingdom ; France's production, which had already exceeded the 1934-38 average in 1949, increased by a further 6 per cent. But in total European meat production was still about 11 per cent below the pre-war average.

Along with meat, the output of bread grain also increased in 1950 ; however, the increase was unevenly distributed over the different climatic areas of Europe. In the southern countries, yields were substantially higher than in 1949, when, particularly in Turkey, drought kept them low ; in western European countries there was a slight fall, unimportant because of the opportunity given to these countries to improve their diet by substituting animal produce for cereals ; in eastern Europe, largely owing to drought in Yugoslavia, there was a fall of nearly 1 million tons. In the case of potatoes the story was similar : the crop rose 19 per cent in western Europe, but only 4 per cent in eastern Europe.[2]

Textiles

In 1950, the production of textiles in Europe was 12 per cent higher than in 1949 and, for the first time since the end of the war, somewhat above the 1938 level.[3] The expansion during the year was general, as regards both countries and products ; only in

[1] For details, see Table 16 above.

[2] See Table 17 above.

[3] For details, see Appendix A, Table I

Table 18

PRODUCTION OF COTTON YARN, WOOL YARN AND RAYON FILAMENT YARN AND STAPLE FIBRE

Thousands of tons

Country	Cotton Yarn				Wool Yarn				Rayon Filament Yarn and Staple Fibre			
	1938	1948	1949	1950	1938	1948	1949	1950	1938	1948	1949	1950
Austria	33 [a]	12	18	19	13 [a]	7	9	11	1 [a]	11	17	33
Belgium-Luxembourg	75	80	84	98	26	34	36	40	6	21	19	23
Czechoslovakia	89 [a]	68	76	..	27 [a]	32	35	..	4 [a]	23	26	..
France	250	224	228	251	118	133	123	127	34	77	75	84
Germany	355 [b]	..	..	..	133 [b]	..	..	..	220 [c]	..	.	
of which western zones	281	119	228	282	59	38	65	85	124	69	129	161
Soviet Zone	74				74				97	38	.	
Hungary	18	23	31	35	12	8	8	12	—	1	1	..
Italy	178	184	208	216	71	78	81	82	119	66	86	103
Netherlands	52	48	55	60	10	26	27	27	9	26	29	33
Poland	86 [d]	82	91	.	42 [d]	33	39	..	16 [d]	18	20	22
Portugal	21	31	30	36	5	7	6	.	—	—	—	..
Spain	49 [e]	65	60	58	15 [e]	14	9	10	1	16	18	25
Sweden	28	25	27	28	11	18	19	18	3	12	13	..
Turkey	20	29	30	30	4	8	8	8	—	—	—	.
United Kingdom	432	366	373	387	212	227	240	252	61	106	131	168
Other European countries	72	93	106	120	35	60	67	71	7	33	37	45
Total Europe (excluding U.S.S R.)	1,757	1,482	1,698	1,856	732	770	846	921	481	517	674	828
United States	1,109	1,716	1,486	..	262 [a]	362	312	364	130	510	451	571

Sources and methods see Appendix B

a 1937.

b 1936 and post-war boundaries. Production of cotton yarn and of wool yarn in 1936, pre-war boundaries, was 377 and 141 thousand tons respectively.

c Post-war boundaries Production in pre-war boundaries was 226 thousand tons.

d Post-war boundaries Production of cotton yarn, wool yarn, and rayon filament yarn and staple fibre in pre-war boundaries is estimated as 64, 34 and 10 thousand tons respectively

e 1940

Sweden was there a slight fall from the previous high level of output. Thus, by the last quarter of the year, each individual country except Czechoslovakia had more than regained its own 1938 rate of production.

The pattern of post-war textile production differs greatly from the pre-war pattern as between both products and countries.[1] First, there has been a general displacement of cotton by rayon and wool : the increase in the output of cotton goods in 1950 was only 6 per cent over 1938, compared with 75 per cent for rayon and 27 per cent for wool. Second, the proportionate expansion since 1938 has been much greater in the smaller producing countries than in the four major producers, the United Kingdom, western Germany, France and Italy ; of these, only the United Kingdom has expanded its total textile output by even as much as 12 per cent. This generalization applies also to the expansion of individual products. Thus, in 1950, British output of cotton yarn, in 1938 a quarter of the European total, was still 10 per cent down ; the other European countries, however, had increased their output by more than 10 per cent. In the case of wool yarn, British and French output, one-quarter and one-sixth respectively of the total in 1938, although it increased in 1950 was still below 1937, but output in other countries was 35 per cent higher than in 1938. Similarly, European output of rayon in 1950 was nearly three-quarters greater than in 1938 in spite of a reduction in the output of Italy, which before the war accounted for a quarter of the total.

[1] For details, see Table 18.

Engineering

European engineering output in 1950 was about 12 per cent greater than in 1949. Of the total increase, about half was contributed by western Germany and about one-third by the United Kingdom ; the output

Table 19

INDEX NUMBERS OF ENGINEERING PRODUCTION

Country	Percentage share[a] of total in 1950	*1938 = 100*				*1948 = 100*							
						1949				1950			
		1947	1948	1949	1950[b]	First quarter	Second quarter	Third quarter	Fourth quarter	First quarter	Second quarter	Third quarter	Fourth quarter[b]
Austria	1.6	56[c]	98[c]	152[c]	188[c]	134	146	151	190	181	185	177	222
Belgium	2.3	113	126	122	115	102	104	92	89	88	89	86	102
Czechoslovakia	2.9	97[c]	120[c]	131[c]	156[c]	108	109	102	118	122	126	128	132
Denmark	1.8	140	156	161	179	104	104	94	109	113	117	106	125
Finland	0.4	175	211	230	186	109	108	89	118	111	106	55	79
France	14.8	98	120	141	131	116	128	112	116	109	112	100	116
Germany : western zones	18.8	22	39	66	92	157	161	161	188	189	220	244	294
West Berlin	0 9	..	21	17	24	86	73	76	94	96	101	114	153
Greece	0.1	19	27	31	41	106	113	108	134	115	142	160	189
Hungary	0.9	102	142	199	.	.	.	.	.	.	..	.	
Ireland	0.2	143	215	206	237	88	95	91	109	110	118	101	110
Italy	3.4	77	71	79	84	110	113	108	119	118	122	112	122
Netherlands[d]	3.0	93	122	146	160	112	120	121	126	123	130	143	144
Norway	0.9	130	148	160	162	116	113	89	113	116	114	90	118
Poland	4.7	130[c]	193[c]	240[c]	..	..	..			..	..	..	
Sweden	5.0	154	164	168	171	108	108	91	108	110	108	90	111
Switzerland	1.7	139	139	117	121	..	..	.	.	..	.	.	..
United Kingdom	36.6	132	151	164	182	107	109	104	114	118	120	114	129
Total of countries listed.	100 0	85	102	119	133	115	119	111	123	123	129	125	144

Sources and methods see Appendix B

NOTE. — The indices include, as far as possible, mechanical and electrical engineering, transport equipment (including ships and aircraft) and metal goods, but exclude precision engineering and the clock and watch industries

[a] The figures in this column were obtained by applying the volume indices shown for 1950 (1938 = 100) to 1938 weights which are proportional to net output The figures thus calculated take no account, therefore, of shifts in relative prices since 1938

[b] Provisional

[c] 1937 = 100 , for Poland, current production compared with 1937 production in pre-war area

[d] Including the manufacture of metals

of the third big producer, France, was down by 7 per cent. It was mainly owing to the decline in French output that the total rose less than in the previous year : the smaller producing countries, considered as a group, achieved about the same rate of increase in both years.[1] Total output was one-third higher in 1950 than in 1938 ; nearly 70 per cent of the extra output was in the United Kingdom.

The most spectacular increase over pre-war levels of production has been achieved in the case of tractors ; [2] their output was, in 1950, 35 per cent greater than in the previous year and about six times as great as in 1938. As a result, there were, in 1950, about four times as many tractors on European farms as there had been in 1938 ; there still remained, however, wide variations between tractor densities in different countries.[3] The United Kingdom produced nearly half of the total output. British production had shown a dip in 1949, as both home and foreign demand fell ; foreign sales more than recovered in 1950 in spite of the emergence of western Germany as an exporter, but production for the home market, though it rose, was still below the 1948 level.

The production of other agricultural machinery also rose somewhat in the United Kingdom in 1950, mainly because of increased exports ; in western Germany there was actually a fall in production in spite of a rise in exports.

The output of motor vehicles [4] continued to increase at a rate well above the average for engineering as a whole. The production of passenger cars was up by 40 per cent compared with 1949 and 45 per cent compared with 1938. This latter increase, though large, compares with a rise of 70 per cent in the United States between 1937 and 1950. The limits to European output were still set by capacity and, in the United Kingdom, by supplies of sheet steel, and not by demand. In the United Kingdom, for instance, supplies to the home market have been deliberately restricted by the Government, and the whole increment of output in 1950 was exported. In France, too, the market prices of used cars continue to exceed the list prices of new cars. The output of commercial vehicles has recently expanded less than that of automobiles, mainly because it had already increased more ; even in 1948, Europe's stock of commercial vehicles was 40 per cent greater than in 1938. France is the only important country where the proportionate increase has been greatly below the average. In the United Kingdom, demand was so buoyant that, in order to divert supplies to export markets, a tax was imposed in 1950 on purchases of new lorries and vans ; this damped down demand only slightly.

In the case of other transport equipment the trend now runs in the opposite direction. Only in eastern Europe has the demand for locomotives and railway wagons seemed to have been maintained recently, and even there fleets of road vehicles have been increasing faster. In the more developed countries of western Europe the demand for railway equipment flattened out or even fell when the post-war reconstruction of railway systems was completed. The fall in demand in France in 1950 contributed appreciably to the depression of the French engineering industry that lasted until the fourth quarter of the year. In the United Kingdom, production of wagons fell in 1949, mainly because of a reduction in home demand, and did not recover in 1950. British production of passenger coaches, however, continued to increase. In western Germany in the second half of 1950, the production of wagons fell to only one-eighth of the 1949 rate.

The tonnage of merchant ships launched [5] increased by one-sixth in 1950 and was about 13 per cent higher than in 1938 ; the United Kingdom's share was about half, a proportion rather higher than before the war, when German production was considerable. In 1949 there had been a small decline in shipbuilding activity in the United Kingdom, but, in 1950, shipyards were again fully occupied in all countries except western Germany, where output was still restricted by the Occupying Powers, and Italy, where there is still considerable unused capacity. The increase in European fleets during the year was of the order of 3½ per cent : [6] in total, they were still smaller than in 1938, again because of the elimination of German tonnage.

The supply of mining machinery fell somewhat in both 1949 and 1950 : this was mainly due to a reduction in the nationalized coal industry's demand in the United Kingdom. British exports of coal cutters and power loaders have remained stable for three years now, and exports of mechanical conveyors,

[1] For details, see Table 19 above.
[2] For details, see Appendix A, Table XXIV
[3] For details, see Appendix A, Table XXIII.
[4] For details, see Appendix A, Table XX.
[5] For details, see Appendix A, Table XVIII.
[6] For details, see Appendix A, Table XVII.

Table 20. — ENGINEERING PRODUCTION AND EXPORTS OF THE UNITED KINGDOM, THE WESTERN ZONES OF GERMANY AND BELGIUM

UNITED KINGDOM *(Annual totals)*	Unit	Total Production			Production for Export			Production for Home market		
		1948	1949	1950	1948	1949	1950	1948	1949	1950
Passenger cars and chassis	£ million	112 6	144.7	189 0	63 3	77 3	124 5	49 3	67 4	64 5
Commercial motor vehicles and chassis	£ million	109 5	127 4	146 0	41 5	45 5	69.2	68 0	81 9	76.8
Steam locomotives	Number	779	826	808	320	389	355	459	437	453
Coaching vehicles	Number	1,516	2,089	3,320	179	262	373	1,337	1,827	2,947
Railway wagons	Number	45,520	38,379	38,155	4,079	6,333	4,604	41,441	32,046	33,551
Railway brakes, signalling, telegraph and track equipment	£ thousand	5,307	6,079	5,786	2,446	2,619	2,782	2,861	3,460	3,004
Aircraft	Number	444	452	515	311	418	477	133	34	38
Tractors (including industrial)	Thousands	118	91	123	74	56	85	44	35	38
Other agricultural machinery	£ million	69 2	63 9	84 7	28 2	26 1	42 8	41 0	37.8	41 9
Excavators	Number	1,356	1,572	1,704	564	816	924	792	756	780
Mechanical handling equipment	£ million	27.6	33 6	37 8	9 1	9 9	10 0	18 5	23.7	27 8
Civil engineering plant	£ million	14.2	14 2	16 8	6 3	5 8	7 8	7 9	8 4	9.0
Textile machinery	£ million	56 4	67.1	69 3	31 8	36 4	36 4	24 6	30 7	32 9
Printing and bookbinding machinery	£ million	11.4	14 2	17 6	6 6	7.4	8 9	4 8	6 8	8 7
Metal-working machine tools	£ million	31.1	35 6	38 7	11 3	14 0	14 1	19 8	21 6	24 6
Internal combustion engines	£ million	27 1	33 4	38 1	12 9	18 6	22 0	14 2	14 8	16.1
Steam engines, boilers, steam-raising plant, industrial valves	£ million	30 4	34 4	37.6	9 6	10 3	10 2	20 8	24 1	27 4
Electric generating plant :										
hydraulic turbines	Thousand BHP	76 8	451 2	589.2	50 4	207 6	434 4	26 4	243 6	154 8
steam turbo alternators	Thousand kW	1,642	2,254	2,630	685	731	995	957	1,523	1,635
Rotating electrical machinery	£ million	28 0	29.5	30 0	5 0	6 9	6 6	23 0	22 6	23 4
Refrigerating machinery	£ million	14 2	18.7	22 9	4 9	7.4	10 0	9.3	11.3	12 9
Typewriters and office machines	£ million	12 9	16 0	21 9	4 0	4.9	7 6	8 9	11 1	14 3
Coal cutters	Number	1,248	1,144	891	315	373	321	933	771	570
Power loaders	Number	155	113	95	35	27	30	120	86	65
Underground conveyors	Number	4,031	3,796	3,024	455	849	675	3,576	2,947	2,349

WESTERN ZONES OF GERMANY *(Half-yearly rates)*	Unit	Total Production			Production for Export [a]			Production for Home market		
		1949	1950		1949 [b]	1950		1949	1950	
			First half	Second half		First half	Second half		First half	Second half
Metal-working machine-tools	Thousand tons	28 5	35 4	47 9	3 5	10 5	24 3	25 0	24.9	23.6
Wood-working machine-tools	Thousand tons	17 2	17 8	20 3	0 7	2.4	4 2	16 5	15 4	16.1
Food and drink processing machinery	Thousand tons	27 3	24 7	31 2	1 0	3.1	5 8	26 3	21 6	25 4
Agricultural tractors	Thousands	13 5	23 2	34 4	0 7	5 7	6 7	12 8	17 5	27.7
Other agricultural machinery	Thousand tons	105 1	89 5	105 4	5 5	22 4	20 5	99 6	67 1	84 9
Typewriters	Thousands	61 0	90 6	118 7	2 9	14.9	34 2	58 1	75.7	84 5
Sewing machines	Thousands	132	223	294	15	77	119	117	146	175
Passenger cars	Thousands	52	90	126	7	26	41	45	64	101
Commercial vehicles	Thousands	29	33	53	4	14	29	24	19	22
Railway wagons	Number	6,612	1,651	807	..	.	.	.	.	
Precision tools	Thousand tons	5.2	4 7	5 5	..	.	.	..	..	
Construction machinery	Thousand tons	12 7	19 4	25 9	..		.			
Mining machinery	Thousand tons	70 9	70 7	71.7					..	
Storage batteries	Thousands	11,496	12,702	17,778	..	.	..	.	.	
Radio receivers	Thousands	574	727	1,281			..		.	

BELGIUM *(Quarterly averages)* *Thousands of tons*	Value of production 1949 First half (million francs)	Total Production			Production for Export			Production for Home market		
		1949 First half	1950 First three quarters	1950 Fourth quarter	1949 First half	1950 First three quarters	1950 Fourth quarter	1949 First half	1950 First three quarters	1950 Fourth quarter
Wire drawing, rolling, pressing, forging, stamping, etc.	1,428	128 5	109 1	148.9	69 1	57 3	91 1	59 4	51 8	57.8
Sheet metal work	1,961	122 3	133.2	164.9	46 1	37.3	58.5	76 2	95 9	106 4
Shipbuilding	687	7.6	6 7	4.9	4 9	3 1	2.9	2 7	3 6	2.0
Railway and tramway material	1,433	73 1	12 2	13 8	46 2	6.5	10 2	26 9	5.7	3.6
Motor cycles, aircraft, pumps, compressors, etc	859	12 8	16 0	16 0	3.1	4 2	4.5	9.7	11 8	11 5
Machine tools, etc	529	8.3	6 0	6 2	5.1	3 9	4.1	3 2	2 1	2.1
Electrical engineering	1,671	25 7	26 8	23 9	6 5	4 8	6.5	19 2	22 0	17.4
Other machinery	1,251	23.3	22 6	32 1	6.7	6 1	6 7	16 6	16 5	25 4
Total	9,819	401 6	332 6	410 7	187.7	123 2	184 5	213 9	209 4	226.2

Sources United Kingdom – *Monthly Digest of Statistics*, western zones of Germany – *Wirtschaft und Statistik* and *Der Aussenhandel der Bundesrepublik Deutschland*; Belgium – *Bulletin de statistique*.

a Deliveries The production and export figures may not be strictly comparable

b Excluding exports from the French Zone.

though they declined in 1950, were still 50 per cent above the 1948 level. In western Germany there has been no expansion in output in either of the last two years.

In the case of machine-tools, the rise in the western German output was the most important new development in 1950 ; almost the whole increment was exported. British output rose by perhaps 10 per cent, as in the previous year, but the United Kingdom still remains heavily dependent on imported supplies.

The export trade of European countries in engineering products was in 1950 dominated by the re-emergence of Germany as a major producer and by the currency devaluations of 1949. The joint effect of these two factors was a reduction in Belgian and Italian exports and an increase in those of other countries. The sensitivity of Belgian production to changes in foreign demand is strikingly brought out in Table 20. Throughout 1950 domestic demand was running at very much the same rates as in 1949 ; the whole increase of nearly 25 per cent in the value of production in the fourth quarter of the year was due to a rise in exports.

Building

The rise in building activity which occurred in 1950 mainly reflected decisions taken by Governments in 1949 to expand housing programmes. In most of the countries of western Europe where unemployment was already low no great expansion of dwelling construction took place. The single exception was France, but even there the increase in new house construction merely offset the decline in other building work. In the countries with high unemployment, however—western Germany, Italy and Belgium—the expansion of new house construction was intended to be, and was, substantially greater than the falls in repair work (in Germany and Belgium) and in public works (in Italy). As a result, the number of rooms constructed per head of the population in western Germany reached the levels of the countries of northern Europe for the first time since the war ; [1]

Table 21

INDEX NUMBERS OF BUILDING ACTIVITY

Country	*1938 = 100*		
	1948	1949	1950
Belgium [a]	93	104	113
Denmark [b]	119	128	147
Finland	138	149	159
France	123	125	123
Germany : U.K./U.S. Zone		70	81
Greece	125	133	.
Ireland	97	108	110
Italy	87	94	140
Netherlands	108	113	119
Norway	124	136	139
Sweden	117	119	125
United Kingdom	85	89	94

Sources and methods see Appendix B

NOTE — The figures shown cover estimates of total building activity, but for Finland they are based on the consumption of raw materials, and for Italy on the number of rooms constructed and man-hours spent on public works

a 1936-1938 = 100

b 1938/39 = 100

in Italy it reached the level of France, but still remained low. In western Germany, moreover, the number of dwellings completed appears to have exceeded the number produced in any inter-war year, though the size of the average dwelling is undoubtedly smaller than was normal before the war. In France, the number of dwellings produced in 1950 was less than half of the number produced during the inter-war peak period and in the United Kingdom only 55 per cent ; the average size has, however, increased in the United Kingdom.

In the countries of eastern Europe, building activity has been considerably expanded in recent years. The number of workers in the building industry has increased, and there have been substantial increases in productivity. These have come as the result of reorganization of the industry into larger units and a concomitant increase in the degree of mechanization : thus, in Hungary, the total horse-power of the machinery used by the building industry increased from 45,000 in 1949 to 94,000 in 1950. But, although the scale of housing programmes has in recent years increased, the number of dwellings built, in relation to needs, was still pitifully low in 1950, particularly when it is borne in mind that the shifts of population from country to towns are relatively greater than in the more settled communities of the west.

[1] See Table 22. The figures in the last column of this table must be interpreted with a certain degree of caution, as the size of dwellings varies greatly from country to country and post-war houses are sometimes of different sizes from those of pre-war Thus, it is estimated that a subsidized western German dwelling contains about 50 to 65 square metres of gross floor space, as against 95 to 100 in the United Kingdom. The corresponding house in the United Kingdom before the war contained about 75 square metres

Table 22

CONSTRUCTION OF DWELLINGS

Country	Pre-war [a] period	Dwelling units completed *(Thousands)*					Estimated number of rooms constructed per 1,000 inhabitants in 1950
		Pre-war	1947	1948	1949	1950	
Austria	.	.		13	13	21	7
Belgium	1925–1929	25	14	19	26	40	17
Czechoslovakia	1937	42	3	6	10	13	2
Denmark	1934–1937	21	13	20	24	22	21
Finland [b]	1936–1939	7	7	5	7	12	20
France	1929–1932	151	8	22	51	68	6
Germany : western zones	1928–1931	190	..		130	302	21
Hungary [c]	1938	7	..			28	5
Ireland [d]	1933–1936	11	1	2	6	12	16
Italy [e]	1934–1937	44	15	22	30	60	6
Netherlands	1928–1931	49	9	36	43	47	16
Norway	1939	16	15	16	18	22	32
Poland	1937	34	29	21	21	34	3
Portugal	1939	2	3	3	7	5	2
Rumania [b]	1931–1934	12		.	..	8	3
Spain	.	.	12	16	15	16	2
Sweden	1939	59	58	48	42	45	23
Switzerland	1930–1933	20	21	26	20	23	18
United Kingdom [f]	1935–1938	358	186	239	198	198	20
Yugoslavia	.	.	7	14	31	28	5

Sources and methods see Appendix B

[a] Except where only one year is specified, the figure represents the highest average annual rate at which dwellings were completed during any four consecutive years in the inter-war period

[b] Town dwellings only

[c] The pre-war figure relates to town dwellings only, post-war figures to all dwellings

[d] Dwellings built with State aid

[e] The pre-war figure relates to 94 provincial capitals, post-war figures to all Italy

[f] Excluding Northern Ireland

In the Soviet Union, 100 million square metres of housing space have been built or restored in towns in the last five years ; this is approximately the same as the extent of the United Kingdom's new dwellings over the same period. In addition, 2.7 million houses were built in villages.

Capital formation

The increases in engineering production and building activity discussed in earlier sections of this chapter were the reflection of an increase in the volume of fixed capital formation. This increase was common to all but two of the European countries for which estimates of total investment are given in Table 23.

The two exceptions are Norway, where there was a very slight decline from the abnormally high levels of earlier years, and France, where there was, in spite of a considerable rise in new housing construction, a net decline of 4 per cent in total fixed investment in real terms. Investment in France in transport and communications fell by over one-quarter, and investment by manufacturers, which had risen by over two-thirds in 1949, fell back by 14 per cent. The initial impact of both of these cuts fell mainly on the engineering industry.

The biggest rise in 1950 was achieved in western Germany, where fixed capital formation, which had already in 1949 increased by about one-third above the low level of 1948 and earlier years, rose by a further 16 per cent. The increase was made up of a rise of one-quarter in new housing construction, an increase of 20 per cent in investment by industry and substantial increases in investment by farmers and transport undertakings.

Total investment appears to fluctuate more violently in Switzerland than in any other country ; a rise of 10 per cent in 1948 was followed by a fall of more

Table 23

GROSS INVESTMENT IN FIXED CAPITAL

Millions of dollars in 1950 prices [a]

Country	1947	1948	1949	1950	Per head of population 1950
					(dollars)
Austria	.		320	350	49
Belgium	610	685	715	755	87
Denmark	395	415	500	550	130
Finland	205	230	260	270	66
France	3,020	3,560	3,600	3,440	81
Germany : western zones	..	2,950	4,070	4,710	99
Ireland	133	160	176	..	60
Italy	1,800	2,010	2,360	2,510	54
Netherlands	923	1,070	1,215	1,280	128
Norway	435	415	470	460	141
Sweden	1,230	1,140	1,095	1,170	167
Switzerland	515	573	449	502	108
United Kingdom	4,775	5,020	5,395	5,645	111

Sources and methods see Appendix B

NOTE — Gross investment in fixed capital includes new acquisitions and the reconstruction of fixed capital, but, as far as possible, excludes expenditure on current maintenance and repairs.

a Converted from national currencies by estimated purchasing-power parity exchange rates for each year See Appendix B

than 20 per cent in 1949, which in turn gave place to a rise of over 10 per cent in 1950. Only one-sixth of the 1949 fall was accounted for by a decline in building activity ; this decline was more than made up in 1950, and there was a rise of 16 per cent in other investment, which was, however, still only about two-thirds of the 1948 level.

The distribution of total investment amongst different sectors of the economy varies considerably from country to country, but remains remarkably stable from year to year in each country.[1] However, in most countries, as railway systems have been restored the proportion of investment devoted to transport has tended to fall. Investment in agriculture has remained more or less stable, so that its share in rising totals has fallen; this was particularly noticeable for Italy in 1950.

Table 25 shows a break-down of the industrial investment of a number of countries in recent years. In general, the biggest single investing industry seems still to be the public utilities supplying energy (mainly electricity) ; their share of total industrial investment ranges from 16 per cent in Belgium to 28 per cent in Italy. Within manufacturing, the heavy industries (iron and steel, engineering, oil refining and, in Scandinavia, timber and paper) everywhere accounted for a large proportion.

The net result of the various changes in 1950 was to reduce slightly inter-country differences between levels of new investment per head of population. But the differences still remained large and anomalies commented upon in earlier SURVEYS still remain. In the countries with full employment, where a reduction of investment programmes might usefully have reduced inflationary pressures, new investment per head of population remained high, particularly in the Scandinavian countries. In countries where no shortage of manpower or capacity inhibits the supply of investment goods (for example, Austria, Belgium, France, Italy), financial caution on the part of Governments continues to encourage low investment, both public and private. Yet these are almost certainly among the countries where increased investment is most urgently needed if productivity is to be raised or unemployment reduced.

[1] For details, see Table 24.

Table 24

GROSS INVESTMENT IN FIXED CAPITAL BY ECONOMIC SECTORS

Millions of dollars in 1950 prices [a] and percentages

Country and year	Millions of Dollars						Per Cent of Total Investment in Fixed Capital				
	Agriculture, fishing and forestry	Industry	Transport and communications	Dwellings	Government and other sectors	Total	Agriculture, fishing and forestry	Industry	Transport and communications	Dwellings	Government and other sectors
Belgium . 1947	17	163	209	133	88	610	3	27	34	22	14
1948	25	186	242	136	96	685	4	27	35	20	14
1949	26	205	218	162	104	715	4	29	30	23	14
1950	27	205	233	175	115	755	4	27	31	23	15
Denmark . 1947	21	..	..	75	.	395	6		..	19	
1948	29	.	..	83	.	415	7	.	..	20	
1949	28	..		82		500	8		.	16	
1950	..	..	..	86	..	550	..	..	..	16	..
Finland [b] . 1947	38	83	65	89	20	295	13	28	22	30	7
1948	45	85	51	112	37	330	14	25	15	34	12
1949	50	93	63	117	47	370	14	25	17	31	13
1950	45	92	67	124	47	375	12	25	18	33	12
France . 1949	325	1,645	745	455	430	3,600	9	45	21	13	12
1950	340	1,490	550	635	425	3,440	10	43	16	19	12
Germany : western zones 1949	385	1,575	545	845	720	4,070	9	39	13	21	18
1950	430	1,890	605	1,055	730	4,710	9	40	13	22	16
Hungary . 1950	..	..	..	..	..	..	11	45	21	15	8
Italy . 1947	135	652	533	205	275	1,800	8	36	30	11	15
1948	206	790	481	224	309	2,010	10	39	24	11	16
1949	250	930	446	304	430	2,360	11	39	19	13	18
1950	177	1,025	513	354	441	2,510	7	41	20	14	18
Netherlands 1947	92	295	295	98	143	923	10	32	32	11	15
1948	78	359	299	167	167	1,070	7	33	28	16	16
1949	91	423	279	236	186	1,215	8	35	23	19	15
1950	100	470	281	238	191	1,280	8	37	22	18	15
Norway 1947	56	93	191	67	28	435	13	22	44	15	6
1948	51	113	166	61	24	415	12	27	40	15	6
1949	51	131	192	68	28	470	11	28	41	14	6
1950	52	134	181	67	26	460	11	29	40	14	6
Poland [c] 1947	68	152	120	37	53	430	16	35	28	9	12
1948	72	203	140	52	93	560	13	36	25	9	17
1949	..	..	.	..			11	41	18	8	22
1950	..	..		.	.		10	42	16	8	24
Sweden [b] . . . 1947	144	607	315	504	190	1,760	8	34	18	29	11
1948	166	633	323	384	224	1,730	10	36	19	22	13
1949	169	643	275	393	233	1,713	10	38	16	23	13
1950	181	644	315	422	248	1,810	10	36	17	23	14
United Kingdom . 1947	270	1,760	1,070	1,255	420	4,775	6	37	22	26	9
1948	290	1,945	1,010	1,220	555	5,020	6	39	20	24	11
1949	275	2,200	1,120	1,080	720	5,395	5	41	21	20	13
1950	285	2,375	1,070	1,075	840	5,645	5	42	19	19	15

Sources and methods see Appendix B

Note — Gross investment in fixed capital includes new acquisitions and the reconstruction of fixed capital, but, as far as possible, excludes expenditure on current maintenance and repairs

a Converted from national currencies by estimated purchasing-power parity exchange rates for each year See Appendix B.

b The figures include expenditure on current maintenance and repairs Hence, the annual totals are greater than those in Table 23 and the percentage distribution may not be comparable with those for other countries In particular, relative expenditure on dwellings construction is overstated

c The figures for 1947 and 1948 relate only to investment within the Plan Investment outside the Plan was important only in agriculture, fishing, forestry and for the construction of dwellings For 1949 and 1950, the figures relate to the whole economy

Table

GROSS INVESTMENT IN FIXED

Millions of dollars in

Industry	Belgium								Den-			
	1947		1948		1949		1950		1947		1948	
	Millions of dollars	*Per cent*	Millions of dollars	*Per cent*	Millions of dollars	*Per cent*	Millions of dollars	*Per cent*	Millions of dollars	*Per cent*	Millions of dollars	*Per cent*
Food, drink and tobacco	16	*9*	14	*8*	24	*12*	23	*11*	7	*15*	11	*19*
Textiles and clothing	23	*15*	21	*11*	26	*12*	23	*11*	5	*11*	9	*15*
Leather and rubber	..	.	..	..	.	.	1	..	..	.	.	.
Paper and printing	5	*3*	5	3	6	*3*	2	*1*	5	*11*	6	*10*
Timber	..	..	..	..	..	.	.	..	2	*4*	2	*3*
Building materials, etc.	13	*8*	12	*7*	14	*7*	12	*6*	4	*9*	5	*8*
Iron and steel	13	*8*	15	*8*	26	*12*	22	*11*	16	*34*	19	*32*
Other metals and engineering	28	*17*	29	*16*	25	*12*	25	*12*				
Oil refineries		.	2	*1*	7	*3*	15	*8*	6	*12*	6	*10*
Other chemicals	11	*7*	20	*10*	16	*8*	14	*7*				
Miscellaneous	5	*3*	—	—	—	—	—	—	2	*4*	2	*3*
Total manufacturing	114	*70*	118	*64*	144	*69*	137	*67*	47	*100*	60	*100*
Electricity	27	*17*	34	*18*	31	*15*	33	*16*				
Gas	10	*6*	13	*7*	11	*6*	10	*5*				
Coal mining	12	*7*	21	*11*	19	*10*	25	*12*				
Other mining	—	—	—	—	—	—	—	—	—	—	—	—
Other	—	—	—	—	—	—	—	—	—	—	—	—
Total Industry	163	*100*	186	*100*	205	*100*	205	*100*				

Industry	Italy				Netherlands				Norway [b]					
	1949		1950		1948		1949		1947		1948		1949	
	Millions of dollars	*Per cent*	Millions of dollars	*Per cent*	Millions of dollars	*Per cent*	Millions of dollars	*Per cent*	Millions of dollars	*Per cent*	Millions of dollars	*Per cent*	Millions of dollars	*Per cent*
Food, drink and tobacco	.	..	..		46	*13*	48	*11*	15	*10*	13	*8*	14	*8*
Textiles and clothing	100	*10*	100	*10*	36	*10*	41	*10*	11	*7*	11	*7*	12	*6*
Leather and rubber					7	*2*	7	*2*	3	*2*	3	*2*	3	*2*
Paper and printing		.			16	*5*	20	*5*	20	*13*	21	*12*	23	*12*
Timber				.	5	*1*	5	*1*	7	*5*	5	*3*	5	*3*
Building materials, etc	.	.		..	7	*2*	9	*2*	7	*5*	6	*4*	7	*4*
Iron and steel	215	*23*	250	*24*	77	*21*	77	*18*	31	*20*	26	*15*	29	*15*
Other metals and engineering														
Oil refineries	.			.	21	*6*	43	*10*	10	*7*	21	*12*	21	*11*
Other chemicals	.		.	..	39	*11*	46	*11*						
Miscellaneous	..		..	.	9	*3*	9	*2*	—	—	—	—	—	—
Total manufacturing	625	*67*	680	*66*	263	*74*	305	*72*	104	*69*	106	*63*	114	*61*
Electricity	250	*27*	285	*28*	56	*15*	76	*18*	38	*24*	36	*21*	47	*25*
Gas	.	.	.	..					1	—	1		1	
Coal mining	55	*6*	60	*6*	25	*7*	27	*6*	8	*5*	13	*8*	17	*9*
Other mining	—	—	—	—										
Other	—	—	—	—	15 [d]	*4*	15 [d]	*4*	4 [e]	*2*	12 [e]	*8*	9 [e]	*5*
Total Industry	930	*100*	1,025	*100*	359	*100*	423	*100*	155	*100*	168	*100*	188	*100*

Sources and methods see Appendix B

Note — Gross investment in fixed capital includes new acquisitions and the reconstruction of fixed capital, but, as far as possible, excludes expenditure on current maintenance and repairs

a Converted from national currencies by estimated purchasing-power parity exchange rates for each year. See Appendix B

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CAPITAL IN INDUSTRY

1950 prices [a] and percentages

MARK				FRANCE						GERMANY : western zones		Industry
1949		1950		1948		1949		1950		1950		
Millions of dollars	*Per cent*	Millions of dollars	*Per cent*	Millions of dollars	*Per cent*	Millions of dollars	*Per cent*	Millions of dollars	*Per cent*	Millions of dollars	*Per cent*	
12	*17*	15	*22*				.	60	*4*	..	.	Food, drink and tobacco
12	*17*	12	*17*		.			.		.		Textiles and clothing
.	..		.	..	.			.	..			Leather and rubber
9	*14*	6	*8*	.	..		.	..	.			Paper and printing
1	*1*	2	*3*	..	.	.		..	..	.	..	Timber
6	*8*	8	*12*	..	..	.	.	.	.	..	.	Building materials, etc.
19	*28*	16	*23*	69	*6*	160	*10*	157	*11*	115	*6*	Iron and steel
							.		.	.		Other metals and engineering
8	*12*	8	*12*	89	*8*	90	*5*	87	*6*			Oil refineries
				.	..	..	.	62	*4*			Other chemicals
2	*3*	2	*3*	.			.	.			.	Miscellaneous
69	*100*	69	*100*	622	*57*	1,035	*63*	887	*59*	1,335	*70*	Total manufacturing
				295	*27*	396	*24*	385	*26*	375	*20*	Electricity
..	.		.	13	*1*	14	*1*	28	*2*			Gas
.	..	..	..	170	*15*	200	*12*	190	*13*	180	*10*	Coal mining
—	—	—	—	—	—	—	—	—	—			Other mining
—	—	—	—	—	—	—	—	—	—	—	—	Other
				1,100	*100*	1,645	*100*	1,490	*100*	1,890	*100*	TOTAL INDUSTRY

SWEDEN								UNITED KINGDOM						Industry
1947		1948		1949		1950		1948		1949		1950		
Millions of dollars	*Per cent*	Millions of dollars	*Per cent*	Millions of dollars	*Per cent*	Millions of dollars	*Per cent*	Millions of dollars	*Per cent*	Millions of dollars	*Per cent*	Millions of dollars	*Per cent*	
24	*5*	25	*5*	26	*6*	26	*6*	170	*9*	179	*8*			Food, drink and tobacco
26	*6*	28	*6*	33	*7*	30	*7*	177	*9*	211	*10*			Textiles and clothing
7	*2*	7	*2*	8	*2*	7	*2*	33	*1*	33	*1*			Leather and rubber
33	*7*	37	*8*	39	*9*	44	*10*	89	*5*	88	*4*			Paper and printing
22	*5*	20	*4*	16	*4*	21	*5*	26	*1*	26	*1*			Timber
31	*7*	26	*6*	19	*4*	23	*5*	70	*4*	66	*3*			Building materials, etc.
137	*30*	143	*31*	136	*31*	143	*32*	118	*6*	145	*7*	..		Iron and steel
								413	*21*	426	*20*			Other metals and engineering
20	*4*	20	*5*	21	*5*	16	*3*	18	*1*	66	*3*	122	*5*	Oil refineries
								133	*7*	160	*7*			Other chemicals
69 [c]	*15*	49 [c]	*10*	33 [c]	*7*	23 [c]	*5*	85	*4*	75	*3*			Miscellaneous
369	*81*	355	*77*	331	*75*	333	*75*	1,332	*68*	1,475	*67*	1,585	*68*	Total manufacturing
74	*16*	89	*20*	91	*20*	91	*20*	343	*18*	415	*19*	458	*19*	Electricity
10	*2*	11	*2*	12	*3*	13	*3*	125	*6*	146	*7*	175	*7*	Gas
—	—	—	—	—	—	—	—	89	*5*	109	*5*	100	*4*	Coal mining
4	*1*	5	*1*	7	*2*	8	*2*	15	*1*	15	—	15	—	Other mining
—	—	—	—	—	—	—	—	41 [d]	*2*	40 [d]	*2*	42 [d]	*2*	Other
457	*100*	460	*100*	441	*100*	445	*100*	1,945	*100*	2,200	*100*	2,375	*100*	TOTAL INDUSTRY

b Including expenditure on current maintenance and repairs, comprising 40 per cent of the total in 1947, 33 per cent in 1948 and 31 per cent in 1949

c Small-scale industry and handicrafts

d Building industry.

e Residual item.

4. Potential Industrial Production in 1951

It is already certain that the level of European industrial production in 1951 will be held down by factors on the supply side rather than by any lack of demand. However much world production of raw materials is increased, the increases are likely to come too late to affect appreciably the supplies available for European industry in 1951, unless indirectly through changing speculative attitudes. A comparison of forecasts of available supplies with actual consumption in 1950 would indicate the extent to which Europe may "go short" in the sense of having to reduce its consumption of particular materials. But this way of measuring degrees of shortage takes no account of the fact that the European economy has recently been expanding fast and could be expected to continue to do so, though not necessarily at the same rate, unless hindered by a lack of demand. For a more meaningful assessment of degrees of shortage, a forecast of supplies of materials must be pitted against a forecast of industrial demand for them. As a preliminary to this it is necessary to form some view as to what the level of industrial production could be if the shortages of materials could be eliminated by a stroke of the pen without changing any of the other conditions of 1951 Europe. This is what is attempted in the following paragraphs. A rough estimate is made of the potential level of European industrial production in 1951, given the existing supply and distribution of manpower, the existing capacity and normal additions to it, given also a continuing high level of demand. It must be emphasized that this estimate is in no sense a forecast, but merely a standard against which the likely level of supplies of materials can be measured.

In the United Kingdom, France, the Netherlands and the Scandinavian countries, industrial employment can be expected to show only a slight change in 1951. The populations of working-age will continue to grow ; the numbers in the armed forces are expected to rise ; there is only negligible scope for a reduction of unemployment ; the proportion of the civilian working population engaged in industry is likely to increase somewhat. On balance, the increase in industrial employment over average 1950 levels has been put at 1½ per cent for the United Kingdom and Ireland, 1 per cent for France and Sweden, 2 per cent for Norway and 3 per cent for Denmark, Finland and the Netherlands. In all these countries the numbers employed in industry had already exceeded the average level of 1950 to nearly this extent by the end of the year. If recent trends continue, a 10 per cent increase can be expected in eastern Europe.

In the case of countries with considerable unemployed labour, it is more difficult to forecast industrial employment. Obviously, very large increases could be brought about if it were possible to reduce unemployment to the proportions now normal in the first group of countries, but it would be unrealistic to expect this to happen everywhere in twelve months.

In Belgium, where unemployment during the first flush of post-war recovery was down to 2 per cent of the labour force, it should be possible quickly to regain a large proportion of the ground lost ; a rise of only 6 per cent in industrial employment has, however, been assumed ; this would still leave employment below the 1948 level. In Austria, employment in 1950 was, on the average, 5 per cent higher than in 1949, but had risen further by the end of the year ; an increase of 5 per cent in 1951 should be well within its powers. In Italy, where unemployment has been endemic since the war, it would be foolish to expect that structural problems could be quickly eliminated, and industrial employment has been assumed to be only 5 per cent higher in 1951 than the average of 1950. In western Germany, total employment increased by over 4 per cent during 1950 and industrial employment by about 9 per cent ; the greater part of this rise happened in the second half of the year, however. If the rate of increase achieved between the second and fourth quarters of the year were kept up throughout 1951, the average level of industrial employment in 1951 would be about 12 per cent higher than the average of 1950. There are no global shortages of manpower or capacity which would rule this out ; unemployment, however, is extremely localized in Germany and it would be unwise to make no allowance for labour bottlenecks. It has therefore here been assumed that the number of man-years worked in industry could be only 10 per cent greater in 1951 than in 1950.

It is unlikely that average working-hours, even on the assumptions made, would increase appreciably. In most European countries the length of the working-week, which was reduced immediately after the war, has remained fairly constant in the last few years. Moreover, it differs little between countries with dif-

ferent levels of employment and output. The average might be very slightly raised by an increase in overtime working in some industries and a reduction in short-time working in others, but it could hardly be an important increase.

Potential productivity is more difficult to estimate. In the northern and north-western countries, the annual rate of increase, as Table 26 shows, has been remarkably stable during the last three years. There seems no reason why, with a continuance of full employment and no lack of materials or demand, it should decline. It has therefore been assumed that productivity per man-year will continue to increase at the 1950 rate in Denmark, the Netherlands, Norway and Sweden, by rather more (8 per cent instead of 5 per cent) in Finland, where output was kept down by strikes in 1950, and, in order to err on the side of caution, by rather less than the 1950 rate in the United Kingdom and Ireland. An increase of 6 per cent has been taken for these last two countries : this implies a rise of 7½ per cent in the industrial output of the United Kingdom, which is certainly not high compared with the official estimate [1] of 4 per cent, which makes allowance for possible shortages of raw materials.

In France, productivity in 1950 as a whole was only 1 per cent higher than in 1949, but this was because the slackening of activity during the first part of the year did not change the level of employment. If productivity remained at the level reached in the last quarter of the year during the whole of 1951 (apart from a seasonal dip in the summer), the average level in 1951 would be 8 per cent above the average level of 1950. The assumption of an 8 per cent rise made here is therefore a conservative one. The same

[1] See the official *Economic Survey for 1951*, para. 110, Cmd 8195, His Majesty's Stationery Office Curiously enough, the official forecast made in 1950 when a smooth flow of materials was contemplated was actually lower than the forecast for 1951, which makes allowance for possible shortages of raw materials.

Table 26

OUTPUT PER MAN IN INDUSTRY

Index numbers based on 1935–1938, 1947, 1948, 1949

Country	*1935–1938 = 100*				*1947 = 100*	*1948 = 100*	*1949 = 100*
	1947	1948	1949	1950 [a]	1948	1949	1950 [a]
Austria	46 [b]	64 [b]	78 [b]	87 [b]	139	122	112
Belgium	81 [c]	85 [c]	90 [c]	96 [c]	105	106	107
Bulgaria	..	..	..	..	.	113	116
Czechoslovakia	95 [b]	106 [b]	118 [b]	126 [b]	112	111	107
Denmark	92	96	98	100	104	102	102
Finland	93	102	109	114	110	107	105
France	81	92	99	100	114	107	101
Germany : western zones	38	52	72	87	135	139	121
West Berlin	.	49	39	63		79	163
Soviet Zone	50	62	76		124	123	114
Hungary [d]	.	..	103	124		..	120
Ireland	106 [e]	112 [e]	117 [e]	128 [e]	106	104	109
Italy	81	86	91	106	106	106	116
Netherlands	73	77	82	86	106	107	105
Norway	88	90	95	99	103	105	105
Poland	83 [f]	102 [f]	112 [f]	..	122	110	109
Sweden	111	116	121	126	105	104	104
United Kingdom	105	112	118	126	106	105	108
Total of countries listed	78	87	97	106	111	111	109

Sources : The figures have been derived from Tables 9 and 11, adjusted to a 1935–1938 base unless otherwise specified See Appendix B.

NOTE — The index numbers for each country represent movements in the ratio of an index of industrial production to an index of employment in mining, manufacturing, gas, water and electricity supply

[a] Provisional

[b] 1937 = 100.

[c] 1936–1938 = 100 for production ; 1937 = 100 for employment.

[d] Productivity of wage-earners in factories

[e] 1936–1938 = 100

[f] The component index numbers compare production and employment in the post-war area with production and employment in the pre-war area.

assumption has been made for Austria, Belgium and Italy ; in all these countries, too, productivity was already well above the 1950 average by the end of the year, and higher rates of increase could easily be justified. In western Germany, output per man-year was 19 per cent higher in 1950 than in 1949, but the rate of increase declined over the year ; an average level only 10 per cent above that of 1950 has been assumed for 1951. For eastern Europe, a further increase of 10 per cent has been assumed ; this is somewhat lower than the exceptional rates of increase achieved in recent years.

Finally, it has been assumed that Portugal, Spain and Turkey could increase their output by 5 per cent above the 1950 levels, Greece by 10 per cent and west Berlin by 25 per cent. These increases seem plausible, but in any case the weight of these areas is so small that a variation of the assumptions would hardly affect the total for Europe.

On these assumptions, the northern and north-western countries could expect to increase production by 7½ per cent in 1951, the southern and other western countries by at least 10 per cent, western Germany by 20 per cent and eastern Europe by between 20 and 25 per cent. For Europe as a whole, the increase in industrial employment in 1951 might thus amount to 4 per cent, the increase in output per man to 9 per cent and the increase in industrial production to about 13 per cent. It is merely a statistical accident that this increase is about the same as that actually achieved in 1950 : the contribution of different countries to the total increase would not be the same. It must be emphasized that this is not a forecast of what will happen, but merely of what might happen on certain assumptions about the level of European demand and the supply of factors of production. One of the assumptions, and only one, was deliberately made quite unrealistic.

Chapter 3

THE SHORTAGE OF BASIC MATERIALS

1. Introduction

The preceding chapter concluded with the estimate that, if manpower and capacity were the only limiting factors, European industry would be capable of increasing its total output by a further 13 per cent in 1951. A shortage of basic materials began, however, to limit production towards the end of 1950, and in many instances it may not be possible to maintain the rates of production reached by that time, let alone achieve any further expansion.

This chapter, after describing briefly the industrial uses of the main materials, continues in section 2 to describe the main shortages which developed in 1950. In section 3, estimates are made of the supplies available for consumption and of the limits which they may impose on European production. Section 4 discusses longer-term problems and analyses the more basic causes of the present shortages.

The prospective shortages embrace both essential materials in which Europe is largely self-sufficient, such as coal, steel, timber, and materials chiefly imported from overseas, such as non-ferrous metals, sulphur, cotton, wool and rubber. European production of the former category is continuing to expand, but too slowly in relation to demand ; production of most of the other materials in the world as a whole is also expanding, but the rate of increase in United States demand is so large that supplies available for Europe may actually fall. The rapid expansion of the United States economy, coupled with the strong balance-of-payments position of that country, has led Europe to import less or export more of many basic materials ; coal and timber, however, are exceptions ; increased imports of these materials from America are helping to alleviate the European shortage, although at a high cost because of freight charges on these bulky commodities.

An early symptom of the shortages was the sharp rise, in the second half of 1950, in prices some of which had previously been falling for more than twelve months. The increase was not restricted to commodities imported from overseas. Price changes for individual commodities over the year as a whole have already been noted in Chart 2, page 9 ; other prices of particular importance in intra-European trade, but not entered on the chart, were those of Swedish timber and wood-pulp, which rose by more than 50 per cent in the six months following the outbreak of the Korean war, and those of Polish coal exports, which more than doubled in the same period. The prices of copper, aluminium and zinc rose relatively little in the second half of the year owing to the fixing of prices by major United States companies and the fact that administered prices in the British Commonwealth were usually adjusted to the American quotation. The pegging of prices necessarily involved systems of allocation, the appearance of which provided the first direct evidence of physical shortages. Free market prices, especially in Continental Europe, rose much above the regular price quotations in the United States or the United Kingdom, the premiums sometimes amounting to as much as 50 per cent for lead, 80 per cent for copper and even more for zinc. The quantities traded at these prices however, remained relatively small. The shortages of sulphur and cotton from the United States were reflected mainly in export restrictions rather than in price increases : the export price of sulphur at the end of 1950 was no higher than at the beginning of the year, and that of cotton, although it rose 40 per cent during the year, failed fully to reflect the world shortage. Consequently, the prices of supplies from alternative sources rose considerably and, as already noted in Chapter 1, it became impossible in many cases to speak of a world price.

Industrial Uses

Coal, steel and timber are used in almost all industries, and their scarcity is bound to have widespread

effects. Shortages of these materials react on one another : a shortage of coal increases the demand for richer iron ores or steel scrap relatively to that for lean ores, which are more easily obtainable ; if the shortage of coal is acute, timber-producing countries may divert resources to the production of fuel-wood, as happened during the war, and a shortage of steel, which encourages the substitution of timber for steel in building, will further accentuate the shortage of softwood. In a period of rearmament the demand for steel is likely to rise faster than industrial production in general and, unless steel output expands adequately, domestic investment or the export of capital goods is likely to suffer if priority is granted to defence production. If the volume of dwelling construction continues to increase, there will be strains on timber supplies which may have marginal effects on supplies of packaging materials and thus affect exports.

Among non-ferrous metals, the shortage is acute in the ferro-alloy group—nickel, chrome, vanadium, manganese, molybdenum and tungsten—the demand for which has already risen greatly as a direct result of rearmament. Western Europe and the United States are affected by the cessation of supplies of tungsten from China and a reduction in Soviet exports of manganese. These metals are particularly important for defence production, but they are also essential for the manufacture of drills, blades, and other tools for civilian use.

Aluminium, copper, lead, tin and zinc are also essential for military and civilian production alike. In recent years, about one-third of the consumption of aluminium in Europe has gone to the manufacture of aircraft, vehicles and other engineering products, while building, electrical apparatus, and domestic appliances and utensils each took a further 10 per cent. In the United States,[1] the proportion used in building and domestic appliances was much higher—about 25 per cent in each case. Recent information on the use of other non-ferrous metals is available only for the United Kingdom and the United States. Differences between the consumption patterns in the two countries reflect the dominant role of the automobile industry in the United States—an important factor in the increases in American consumption of non-ferrous metals generally over the last decade. In both countries, about one-half of total copper consumption is used in the manufacture of electrical wires and other equipment : the building and motor vehicle industries each take about 10 per cent in the United States and rather less in the United Kingdom. In the United Kingdom, lead is chiefly used in cable-making and building, each accounting for about a quarter of total consumption ; the next most important consumers are the manufacturers of batteries and the producers of lead oxides and compounds, mainly required for paints and pigments ; in the United States, batteries take 30 per cent. Of the tin consumed in the United States and the United Kingdom about 40 per cent goes into tinplate, which is widely used for containers of food, motor oil and other goods. Tin is also required for essential alloys —accounting for 30 per cent of consumption in the United States and the United Kingdom—and a further 10 to 20 per cent is used as solder in the electrical industry. Thirty per cent of zinc in the United Kingdom is used for galvanizing steel and another 30 per cent, in combination with copper, for the manufacture of brass ; in the United States, galvanizing takes about 45 per cent and brass only 13 per cent. Another important use of zinc accounting for 30 per cent of total consumption in the United States, but only 10 per cent in the United Kingdom, is die-casting, largely for the motor vehicle industry.

The main non-ferrous metals are often alloyed together and, by varying the proportions, materials particularly suited for given purposes can be obtained.

In the case of the major alloys, such as brass, a shortage of one component reduces the demand for the other, but when the specification of materials required is less exact, as in building and the manufacture of domestic appliances, the composition of the alloys can, within limits, be varied. One metal may also be substituted for another. The most important recent example is the substitution of aluminium—as its relative price fell drastically—for lead in building, for iron in domestic utensils and for copper in electrical appliances. Moreover, in some cases non-ferrous metals can be replaced altogether by plastics, especially in the field of domestic goods. Important changes in relative prices as between non-ferrous metals, or non-ferrous metals and other materials, have usually been followed by significant substitutions.

[1] In general, information about end-uses in the United States relates to 1948.

About 60 per cent of the rubber consumed in the United Kingdom goes into motor tyres, and an even larger proportion in the United States. The remainder is widely used throughout industry : the manufacture of footwear, machine belting and cables each accounts for large quantities. Rubber can replace other materials, mainly leather and plastics, over a wide field.

Sulphur is the base for an important range of chemicals, the most important of which is sulphuric acid (accounting in Europe for three-quarters of the total consumption) and as such it enters into the production of an extremely wide range of commodities. In western Europe the main consumers of sulphur in all forms are agriculture (nearly 50 per cent, mainly as fertilizers), the textile and rubber industries (15 to 20 per cent, mostly in rayon manufacture) ; the remainder is distributed over almost the whole field of industry. The use of sulphur is concentrated in the production of commodities the demand for which has recently been expanding relatively fast and whose production was in fact developed on the basis of discoveries in the properties of chemicals derived from sulphur ; hence little consideration has been given to the use of alternative materials.

2. Developments in the Raw Materials Situation since the War

In 1949 and the early months of 1950, it appeared that the major shortages which had been hindering European production had largely disappeared. The markets for internationally traded commodities which had been scarce earlier had weakened and, as a result, the use of substitute materials was declining. Europe's domestic materials were once again in easy supply and concern was expressed in many quarters that plans to expand European capacity were over-ambitious. In the second half of the year, the whole market atmosphere was again transformed, and it became clear that the earlier surpluses were spurious in the sense that they reflected a temporary deficiency of demand rather than an excess of supplies over the needs of an expanding economy.

Coal Production

In 1950, European output of hard coal was 557 million tons, 23 million tons less than in 1938 and only 2½ per cent more than in 1949. In both western Germany and the United Kingdom, the increases achieved were considerably less than those of 1948 and 1949, and in France and Belgium there was actually a fall in output.

The limits on German and British production were set by factors on the supply side: in western Germany a persistent failure of productivity to rise above two-thirds of the 1938 level, and in the United Kingdom, where output per man-shift rose for the first time above pre-war levels, a decline in manpower. In France and Belgium, on the other hand, the fall in output was due to a lack of demand : the depressed heavy industries' demand fell off in the first part of the year, the nationalized industries reduced stocks, and, in the atmosphere of uncertainty thus created, there was a general tendency for industry's stocks, as well as its consumption, to decrease

Thus, in spite of the failure of production in the two major producing countries to rise, coal appeared to be in plentiful supply and imports from the United States were cut from 10 million to 370,000 tons in 1950 and western European imports of Polish coal by 1½ million tons. In the United Kingdom, for the first time since the war, the price of household coal was reduced in the summer as an incentive to domestic consumers to lay in stocks , in France miners were compelled to work short time.

It was clear, nevertheless, that, once the tempo of industrial activity quickened again, the current rate of production was bound to be too low to meet European total needs and that the balance between production and consumption in the two major western European exporting countries was already precarious. The first signs of shortage in the importing countries came, in fact, not in the form of an increase in their demand, but in the form of fears about the United Kingdom's position. From August 1950 onwards British exports began to fall behind schedule and British and foreign ships were increasingly forced to bunker abroad. In the last quarter of the year British exports to European countries were only about two-thirds as large as a year earlier and in December only one-half as great as in December 1949. Delivery agreements were in some cases broken and new commitments were refused. By this time the level of demand in the importing countries had risen and the shortfall of supplies was therefore greater than the decline in imports.

Table 27

PRODUCTION OF HARD COAL AND LIGNITE AND CONSUMPTION OF SOLID FUELS

Millions of tons

Country	Hard Coal Production				Lignite Production				Solid Fuel Consumption (*hard coal equivalent*)			
	1938	1948	1949	1950	1938	1948	1949	1950	1938	1948	1949	1950
Austria	0.2	0.2	0.2	0.2	3.3	3.3	3.8	4.3	4 2	7.5	8.3	7.8
Belgium-Luxembourg	29 6	26.7	27.9	27.3	—	—	—	—	28 6	30.6	28.7	28 7
Czechoslovakia	15.8	17.7	17.0	18 5	16 0	23 6	26.5	27.5	22 0	30.9	32.4	
France	46.5	43.3	51.2	50.8	1.1	1.8	1.8	1.7	66.8	68.3	77.4	69.6
Saar	14.4	12.6	14.3	15.1	—	—	—	—	207.1			
Germany [a]	177.0	91.3	107.8	115.1	194.8	175.8	195.3	208.1		..	..	..
of which western zones	138 5	88 4	104 8	112 3	68 6	64 9	72 3	75 8		91 3	103 8	109 0
Soviet Zone	6 0	2 8	3 0	2 8	125 8	110 9	123 0	132 3		.	.	.
Italy	1.5	1 0	1.1	1.0	0.9	0.9	0 8	0.8	13.8	9.8	10.1	9.7
Netherlands	13.5	11 0	11.7	12.2	0.2	0 3	0.2	0 2	14.0	13 8	15 0	16.1
Poland [b]	38 1	70 3	74.1	77.8	1.1	5.1	4.6	4 9	26.7	41 7	43 6	
Spain	5.7	10 4	10.6	11.0	0.2	1.4	1.3	1 3	6.6	11 3	12.1	12.1
Sweden [c]	0 3	0.2	0.2	0.2	—	—	—	—	8.0	7.5	6 1	7 3
Turkey	2 6	4.0	4.2	4.4	0.2	1.0	1.3	1 2	2.4	4 4	4 6	4.8
United Kingdom	231.8	212.8	218.6	219.7	—	—	—	—	186.5	199.4	200.9	206.4
Other European countries	2.5	3.4	3.9	4.0	18.0	28.5	30.5	32.4	27.5	27.4	26.9	..
Total Europe (excluding U S S R)	580	505	543	557	236	242	266	282	614	577	607	627
United States [d]	358 0	589 1	429.5	504 6	. *d*	.. *d*	*d*	.. *d*	352.0	526 2	424 6	453.9

Sources see Appendix B.

Note — The production data relate to net pithead production, including the production of opencast coal in the United Kingdom Adjustments have been made for stock changes of solid fuels except in the case of Austria, Czechoslovakia, Italy, Spain and Turkey In the case of Germany, Netherlands, Poland and Sweden, the pre-war year has not been adjusted.

[a] The production data for 1938 relate to pre-war boundaries, excluding the Saar Production in the post-war area for that year was (millions of tons) : hard coal, 144 5 , lignite, 194 4

[b] The production data for 1938 relate to pre-war boundaries Production in the post-war area for that year was (millions of tons) hard coal, 70 6 , lignite, 1 5.

[c] The hard-coal production data relate to hard-coal equivalent of low-grade coal

[d] The production of hard coal includes a small amount of lignite

Had the winter been severe, the inadequacy of British coal production would have had serious effects in the United Kingdom, but, as it was, the measures taken to protect stocks proved sufficient to prevent a breakdown of production such as occurred in 1947. Some train services were cancelled, and restrictions were placed on deliveries to domestic consumers, but the mildness of the weather made it unnecessary to proceed with the drastic cut of supplies to industry announced in February 1951.

In western Germany, shortages were far more severe. The demand for coal had increased rapidly throughout 1950 as industrial output rose. The Occupying Powers agreed to some reduction in deliveries to other countries ; at the end of the year, control of the distribution of coal was tightened, supplies were diverted from power stations, the maximum use was made of the hydro-electric power stations, and stocks were run down to the lowest possible level. By January 1951 no more relief could be gained by these means, and unemployment directly attributable to a shortage of coal arose, while electricity cuts, which would have been more serious if rainfall had not been plentiful, were imposed to replenish stocks at power stations.

Late in 1950, both the normal importing countries and the United Kingdom began to place orders again for American coal. These exceptional cargoes helped to make shipping space scarce, and freight rates rose sharply, so that the freight on American coal, $10 to $15 a ton, itself exceeded pithead prices in Europe. The price of imports from Poland, which had fallen to $10 a ton in the summer of 1950, rose in sympathy and early in 1951 was as high as the landed cost of United States coal.

Steel Production

European production of crude steel in 1950 was 61 million tons, about 11 per cent higher than in 1949. Nearly half the extra output came from western Germany, which was permitted to exceed the limit previously set by the Western Occupying Powers. German output was still one-third below the 1938 level ; output in Austria, Belgium, France, Luxembourg, the Saar and Spain was also still below previous peak levels, and in Italy not above the record output of 1938. In the biggest post-war producing country, the United Kingdom, production in 1950 was nearly one-quarter greater than in the highest pre-war year and 5 per cent greater than in 1949.

As a result of the depressed state of the French and Belgian engineering industries, already discussed in Chapter 2, production of steel in Belgium, France, Luxembourg and the Saar during the first half of 1950 was running at a much lower rate than that of the previous year ; in France, the upturn did not come until the last quarter of the year. [1] The rate of European production at the end of 1950, about 65 million tons per annum, thus considerably exceeded the average rate of the year and was everywhere, except in Germany and the Saar, above previous peak rates. This output had, however, been achieved by running down stocks of steel-making materials in the United Kingdom, for instance, more than half the extra output of 1950 came from a reduction of stocks of iron ore, pig-iron and scrap.

[1] For details of the output of the main producing countries in each quarter, see Appendix A, Table XI

Table 28

PRODUCTION OF CRUDE AND FINISHED STEEL AND CONSUMPTION OF FINISHED STEEL

Millions of tons

Country	Production of Crude Steel				Finished Steel							
					Production				Consumption			
	1938	1948	1949	1950	1938	1948	1949	1950	1938	1948	1949	1950
Austria	0 7	0.6	0 8	0 9	0.5	0 4	0 5	0 6	0.4	0.3	0 4	0 5
Belgium-Luxembourg	3.7	6 4	6.1	6 2	2 8	4 7	4 4	4 6	0 9	1 8	1.3	1 6
Czechoslovakia	2 2[a]	2 7	2.7	2.9	1 3[a]	1.8	1 8	.	1 1[a]	1 6		.
France	6 2	7.2	9 1	8 7	4.1	5 1	6 2	6 0	3 2	5 4	6 1	5 1
Saar	2 6	1.2	1 8	1 9	2 0	0 8	1 2	1 3	13 3[c]			
Germany[b]	19.6	5 9	9 9	13 3	13 0	4 1	7.1	9.5				
of which western zones	17 9	5 6	9 2	12 1	11 7	3 9	6 5	8 4		3 7	6 1	6 9
Soviet Zone	1 7	0 3	0 7	1 2	1 3	0 2	0 5	1 1				
Hungary	0 6	0 8	0.8	1 0	0 4				0 4			. .
Italy	2.3	2.1	2.1	2 3	1.7	1 5	1.6	1.8	1 8	1 6	1.7	2 3
Poland[d]	1.9	2 0	2 3	2 5	1.5		.		1.6[c]			
Spain	0.6	0 6	0 7	0 8	0.4	0 3	0 4		0.4	0 4	0 5	
Sweden	1 0	1 3	1 4	1 5	0.6	0 8	0.9	0 9	0 8	0 8	1 0	1 4
United Kingdom	10 6	15.1	15 8	16.6	7.4	10 7	11.3	12 0	6 6	9.3	10 0	9 8
Other European countries	0 7	1.5	1.8	2 0	0.8	1.2	1 4	1 6	3 0	3 8	3 9	
Total Europe (excluding U.S.S.R.)	53	47	55	61	36	33	38	42	33	31	34	
United States	28 8	80.4	70.7	87.7	21 4	62.8	55 2	68 5				

Sources see Appendix B

NOTE — *Crude steel* Steel ingots and castings, including special alloyed steels whether for use by the maker or for sale Wrought (puddled) iron is excluded

Finished steel The data relate to hot-rolled products Consumption of finished steel is apparent consumption — i e , production of finished steel plus net imports of finished steel with no allowance for change in stocks

a 1937

b The production data for 1938 relate to post-war boundaries Production in the pre-war area, excluding the Saar, was (millions of tons) crude steel, 20 1 , finished steel, 13 5

c Apparent consumption in pre-war area

d The production data for pre-war relate to post-war boundaries Production in the pre-war area was (millions of tons) crude steel, 1 4 , finished steel, 1 1.

Timber and Wood-pulp

Table 29 shows that European production of sawn softwood in 1950 was about the same as it had been in the years 1936-1938. European consumption, however, which before the war had normally exceeded production by 12 per cent, was no greater than production, as imports from North America and the present area of the Soviet Union were still only a quarter of their pre-war volume and only about compensated the European exports to overseas. The whole of this decrease in consumption was concentrated on the importing countries and, in particular, on the United Kingdom.

In the years up to 1949, high consumption and low production in the European exporting countries had reduced their total export surplus to much below its pre-war norm and the dollar shortage had prevented importing countries, particularly the United Kingdom, from buying large quantities of timber in North America. In 1950, total supplies from the European exporting countries—although a post-war record—were still 20 per cent below pre-war. At the same time, however, the import requirements of most European importing countries were greatly increased as a result of the extensive building programmes in these countries and also as a result of rather low stocks in many countries at the beginning of the year. The cessation of large-scale exports from western Germany to other western European countries, together with attempts to bring the level of forest exploitation in that country to a more reasonable level,[1] gradually led western Germany to revert to its traditional position as a substantial importer in order to meet the rising demand from its expanding house-building industry. Thus the sawn softwood supply position in 1950 had become even more favourable for the exporting countries than had been the case in previous years. As a consequence of this development, prices of sawn

[1] Production of sawn softwood increased slightly, however, because the exports which were reduced had mainly consisted of saw-logs (which were now available for German mills).

Table 29

PRODUCTION AND CONSUMPTION OF SAWN SOFTWOOD

Millions of cubic metres

Country	Production				Consumption [a]			
	1934-1938	1948	1949	1950	1934-1938	1948	1949	1950
Exporting countries								
Austria	2.3	1 6	2.7	3.1	0.9	1.1	1.1	1.0
Finland	5.9	4.2	4.4	4.6	1.2	1.9	1.6	1.5
Norway	1.2	1.4	1 8	1.4	1.2	1.4	1.7	1.3
Sweden	6.3	5.4	5.9	6.1	2 5	3.4	3.0	2.5
Eastern Europe [b]	13 4	12.7	12.8	12 5	11.0	11.5	11.5	11.4
Total of countries listed	29.1	25 3	27 6	27.7	16.8	19.3	18.9	17.7
Importing countries								
Belgium	0.2	0 3	0 2	0 2	1.2	0.7	0.6	0.9
Denmark	0.3	0 3	0.4	0.3	1.0	0.8	1.0	1.3
France	2.2	3.6	3 6	2.9	3.0	4.0	3.6	2 9
Germany : western zones	7.5	5.9	7.7	7.8	8.9	5.5	6 9	8.6
Italy	0 6	0.7	0.8	0.8	1.7	1.0	1.5	1.8
Netherlands	0.1	0.2	0.2	0.1	1.7	1.5	1.6	1.9
Switzerland	0.8	1.3	1 3	0.9	0 8	1.2	1.2	1.1
United Kingdom	0.4	0.8	0.4	0.4	10 5	5.6	5.7	4 9
Other European countries	1.6	1.9	1.6	1.8	2 4	1.8	2.1	2.5
Total of countries listed	13.7	15.0	16 2	15.2	31.2	22 6	24.2	25.9
Total Europe (excluding U.S.S.R.)	42.8	40.3	43.8	42.9	48 0	41.9	43.1	43.6

Sources see Appendix B

NOTE — Planks, boards, boxboards, etc, are included, but railway sleepers are excluded Although the coverage may slightly vary from country to country, the series relating to each particular country is consistent

[a] Adjustments have been made for change in stocks in so far as known Trade between the U S S R. and eastern Europe has not been taken into account.

[b] Including the Soviet Zone of Germany

softwood, which already at the end of 1949 showed signs of increase, steadily increased in the course of 1950 and by the end of the year exceeded those ruling at the beginning of the year by 40 to 50 per cent. The attempts of the United Kingdom to resist the increases in Swedish prices in the early part of 1950 failed, and practically the whole Swedish export surplus was placed on other markets. The Swedish initial asking price in 1950 had been £51 per standard f.o.b., but during the year most of the Swedish supplies were sold at prices around £55. The absence of the United Kingdom from the Swedish market made it possible for other importing countries to replenish their stocks and at the same time meet their increased demands ; imports of these countries in 1950 were in fact about 2 million cubic metres [1] higher than in 1949, the greatest increases occurring in imports into Denmark and the Netherlands. Having failed in belated efforts to secure sufficient supplies from Sweden and other European exporting countries, the United Kingdom was forced, towards the end of the summer of 1950, to revert to large-scale buying in Canada. The boom in United States building activity had, however, greatly increased the prices of Canadian timber, and the United Kingdom buyers had to pay prices higher than ever, and also higher than the prices of Scandinavian timber at the time. This in its turn encouraged Scandinavian exporters to increase their prices further, and the United Kingdom later paid prices around £70 to £72 per standard f.o.b. for Swedish sawn softwood. Total United Kingdom imports in the whole year 1950 were substantially lower than in 1949, and by the end of the year stocks in that country were dangerously low. The upward sweep of sawn softwood prices has continued through the early months of 1951 and exporting countries are now asking about £80 to £85 per standard f.o.b.

The demand for wood-pulp has also been rising fast, especially as paper, paper-board and rayon are increasingly used in substitution for other commodities. In 1950, European production expanded by about 10 per cent, but was still much below the level of 1937. In western Europe, considerable production capacity still exists which cannot be used for lack of pulp-wood ; there were no imports of pulp-wood from the Soviet Union in 1950, whereas three million tons were imported from the same area in 1937. Pulp manufacturers have to compete with saw-mills and coal mines for scarce roundwood.

[1] Derived from the trade statistics of the importing countries.

The Non-ferrous Metals [2]

Eastern Europe and the Soviet Union taken as a whole were, before the war, dependent on imports for about half of their supplies of copper and lead and for almost the whole of their tin. But these imports have now shrunk to negligible proportions and production of copper in eastern Germany is still substantially below its pre-war level. It is not known to what extent the deficiencies have been made up by increased production in the Soviet Union—it appears that tin ore is being mined in substantial quantities in the eastern regions and that copper production has also greatly increased. Eastern Europe's aluminium is made from Hungarian bauxite, which is also exported to the Soviet Union ; there is considerable production of zinc in Poland.

Western Europe, on the other hand, is largely dependent on overseas sources for supplies for non-ferrous metals. In 1950, only about one-seventh of its requirements of copper were met by the ore mines of western Europe and Yugoslavia ; the remainder was imported from non-European sources, mainly in the form of metal. About two-fifths of the lead used and about half the zinc was made from European ores, the balance in each case being made up in roughly equal proportions by imported ores and concentrates and imported metal. Before the war, some of the imported zinc came from eastern Europe and the Soviet Union, but since the war almost the whole of the imports have been obtained from overseas. European resources of tin ore are negligible, but ore is smelted in the United Kingdom, the Netherlands and Belgium, and Europe is actually a net exporter of the smelted metal.

Western Europe's consumption of primary copper, lead, tin and zinc was higher in 1950 than in the previous year,[3] the increases varying from 5 to 15 per cent ; but, except in the case of copper, consumption remained lower than it had been before the war. The increases in 1950 were due in large part to the rise in industrial activity in western Germany, whose consumption of primary metals, however, was still well below pre-war levels ; this was the main reason for the reduction in the total consumption of the area compared with pre-war years. Consumption

[2] In all discussions of non-ferrous metals in this chapter, "world consumption" means apparent consumption of imported materials by the Soviet Union and eastern Europe excluding Yugoslavia, plus total consumption in the rest of the world.

[3] See Table 30.

Table 30

CONSUMPTION OF SELECTED NON-FERROUS PRIMARY METALS IN WESTERN EUROPE

Thousands of tons

Country	Aluminium				Copper				Lead				Tin				Zinc			
	1936-1938	1948	1949	1950	1936-1938	1948	1949	1950	1936-1938	1948	1949	1950	1936-1938	1948	1949	1950	1936-1938	1948	1949	1950
Belgium	4	5	6	9	30	54	52	53	42	42	53	55	1.6	1.7	1 0	1.4	104	40	33	36
France	30	80	51	45	114	90	121	115	95	69	53	59	9.4	9.8	8 5	8 5	89	92	109	95
Italy	23	25	29	44	80	57	44	61	49	12	31	42	4.1	3 8	1 6	2 7	34	21	28	33
Netherlands	3	5	3	4	7	7	11	7	27	19	36	26	2 1	3 4	3 3	3.1	13	21	20	20
United Kingdom	41	177	182	184	273	362	324	339	362	191	160	166	22 3	25.6	21.2	23 2	222	227	202	241
Germany · western zones [a]	105	33	35	15	190	45	100	115	180	56	44	69	10 0	1.9	4 0	5.5	165	50	99	118
Other western Europe	19	45	69	54	111	135	118	115	80	76	98	118	7.5	4 8	4 4	4.6	53	79	79	77
Total western Europe	225	370	375	355	805	750	770	805	835	465	475	535	57	51	44	49	680	530	570	620

Sources and methods see Appendix B

Note — Throughout the tables in this chapter, "eastern Europe" includes Albania, Bulgaria, Czechoslovakia, the Soviet Zone of Germany, Hungary, Poland and Rumania The rest of Europe is included under "western Europe"

[a] For aluminium and copper, the figures exclude the estimated consumption of secondary metal For lead and zinc, the figures include some secondary consumption

of primary aluminium in western Europe, other than western Germany, was in 1950 about three times the pre-war figure.

The shortages of non-ferrous metals are global, and it is therefore necessary for the present purpose to examine production and consumption in the world as a whole. Immediately after the war there were large stocks, especially of scrap metal, to draw on, but by 1948 the world had reached a new equilibrium position in the sense that production and consumption

Table 31

WORLD PRODUCTION AND CONSUMPTION OF SELECTED NON-FERROUS PRIMARY METALS

Thousands of tons

Metal and year	World production [a]	Consumption				Change in strategic stocks	Residual [d]
		World [b]	United States	Rest of world [c]	Net exports to U S S R and eastern Europe		
Aluminium							
1936-1938	405	392	119	265	8	—	+ 13
1948	1,115	1,129	642	468	19	—	− 14
1949	1,125	1,100	596	497	7	—	+ 25
1950	1,295	1,311	811	488	12	—	− 16
1951	*1,500*	*1,400*		..	.	+ *100*	—
Copper							
1936-1938	1,795	1,744	553	1,070	121	—	+ 51
1948	2,120	2,115	1,141	950	24	+ 10	− 5
1949	2,100	1,854	836	995	23	+ 160	+ 86
1950	2,340	2,227	1,196	1,015	16	+ 200	− 87
1951	*2,480*	*2,330-2,360*	.			+ *120 to 150*	—
Lead							
1936-1938	1,575	1,530	435	1,030	65	—	+ 45
1948	1,355	1,299	659	640	—	+ 5	+ 51
1949	1,485	1,216	539	670	7	+ 190	+ 79
1950	1,610	1,515	785	725	5	+ 150	− 55
1951	*1,675*	*1,645-1,655*				+ *20 to 30*	—
Tin							
1936-1938	183	166	64	80	22	—	+ 17
1948	160	138	61	73	4	+ 24	− 2
1949	171	120	48	67	5	+ 52	− 1
1950	175	154	77	74	3	+ 45	− 24
1951	*183-188*	*150-166*		.		+ *22 to 33*	—
Zinc							
1936-1938	1,325	1,297	484	855	−42	—	+ 28
1948	1,490	1,468	756	700	12	+ 50	− 28
1949	1,600	1,456	685	760	11	+ 100	+ 44
1950	1,720	1,755	911	840	4	+ 115	−150
1951	*1,850*	*1,770-1,800*	.			+ *50 to 80*	—

Sources and methods see Appendix B

NOTE — In so far as information on change in stocks is available, the figures for consumption relate to actual consumption. The figures of world production for 1951, together with the figures for the addition to strategic stocks, are estimates and are therefore in italics. World consumption in 1951 is derived as a residual

a Excluding the U S S R and eastern Europe other than Yugoslavia

b Including consumption of imported metals in the U S S R and eastern Europe, but excluding their consumption of domestic production

c Excluding net exports to the U S S R and eastern Europe other than Yugoslavia

d This residual represents the net result of (i) changes in commercial stocks in the main consuming countries and (ii) the statistical discrepancies described in Appendix B

were again more or less equal. The dollar prices of copper and tin were then about 125 per cent higher than in 1938 ; in the case of zinc and lead the rises in price over the same period had been 185 and 285 per cent respectively. Consumption of primary lead seemed to have settled down well below the pre-war level : the price rise had brought out increased supplies of scrap, particularly in western Europe, and accelerated the trend towards the replacement of lead by other metals, especially by aluminium. The relatively small rise in the price of tin was associated with a reduction in tin consumption, made possible by the development of electrolytic tinplating, which, it is estimated, made the annual demand in 1948 25,000 tons, or about 20 per cent lower than it would otherwise have been.

Since 1948 there have been three major factors affecting the balance between production and consumption : a steady expansion of demand in the world outside the United States, fluctuations in United States consumption, and fluctuations in purchases for United States stock-piles. In 1949, consumption of copper and lead in the United States fell by about a quarter, but this was partly offset over the year as a whole by purchases for the stock-pile. In 1950, the two factors worked in the same direction : consumption of all non-ferrous metals rose above the 1948 level, and in the case of aluminium and zinc was as much as 20 to 25 per cent above it, and additions to strategic holdings continued to be made, though probably at a reduced rate except in the case of copper and zinc.

In 1949, world production of aluminium and copper remained unchanged, but production of those metals which had become comparatively dear since the war continued to expand. Metal fabricators reduced their stocks of all metals, as Table 37 shows, but this reduction was more than offset by an increase in stocks left in the hands of producers, smelters and refiners. In 1950, world production of all metals expanded. Producers' stocks were now drastically reduced ; so also were fabricators' stocks of copper and zinc ; but fabricators succeeded in increasing their stocks of lead and tin. These changes appear to have occurred mainly in the second half of the year : in the first five months prices in general were stable, and those of lead and tin actually fell ; copper provides the only example of a significant rise in price during that period. After the outbreak of the Korean war, all prices rose sharply, and particularly those of lead and tin ; but, except in the case of tin, the rises were brought to a halt before the end of the year.

Towards the end of 1950, supplies of non-ferrous metals became tight and irregular, and the Governments of the United States and the United Kingdom began to prohibit certain non-essential uses and made supplies for other uses subject to allocation. The aim of the restrictions was to ensure more regular distribution to essential users, to restrain prices and to safeguard supplies for armaments production and stock-piling. The restrictions announced in the United States for the early months of 1951 imply that civilian consumption of aluminium is to be reduced by one-third as compared with 1950, of copper by one-quarter, of zinc by one-fifth, and tin by one-sixth, and that the consumption of lead is to be stabilized at the 1950 level. In the United Kingdom, the cuts are two-fifths for zinc, one-fifth for copper and one-tenth for lead. In most consuming countries, the export of metal and of semi-finished metal products was generally either prohibited or made subject to licence.

Sulphur

In recent years, western Europe has derived about one-quarter of its supplies of sulphur from natural sulphur and the rest from sulphur-bearing materials, of which pyrites is the most important. Pyrites is a domestic European product obtained mainly in the Iberian peninsula, Scandinavia and Italy ; a small part is exported. One-quarter to one-third of the total western European supplies [1] of natural sulphur are normally produced in Italy ; almost the whole of the rest is imported from the United States. In 1950, Italian production of natural sulphur was about 10 per cent higher than that in 1949, but a fall in Europe's imports from the United States more than offset this increase. The decline in the apparent consumption of western Europe was, however, mainly due to an expansion of Italian exports to Australia from under 10,000 to almost 150,000 tons.

Eastern European countries before the war imported natural sulphur from both Italy and the United States, but the level of imports, about 65,000 tons in the years 1936 to 1938, has lately been greatly cut, and in 1950 imports from Italy, the main supplier, were only 5,000 tons. These imports have been replaced by natural sulphur from the developing production of

[1] Supplies for consumption and export.

Table 32

PRODUCTION AND CONSUMPTION OF SULPHUR IN WESTERN EUROPE

Thousands of tons, sulphur content

		1936-1938	1948	1949	1950
United Kingdom [a]					
Natural sulphur	Net imports	135	354	399	446
Pyrites	Production and net imports	164	98	106	92
	Total apparent consumption	299	452	505	538
	Change in stocks of sulphur		+ 2	+ 15	- 19
	Change in stocks of pyrites		- 8	+ 17	- 14
Germany western zones [a]					
Natural sulphur	Net imports	35	13	25	31
Pyrites	Production and net imports	498	353	296	489
	Total apparent consumption	533	366	321	520
Other western Europe [b]					
Natural sulphur	Production	372	212	227	250
	Net imports	−78	175	192	2
	Apparent consumption	294	387	419	252
Pyrites	Production	2,363	1,968	2,062	2,110
	Net imports	−626 [b]	−213	−71	−252
	Apparent consumption	1,737	1,755	1,991	1,858
	Total apparent consumption	2,031	2,142	2,410	2,110
Total western Europe	Total apparent consumption	2,863	2,960	3,236	3,168
	of which : natural sulphur	464	754	843	729
	pyrites	2,399	2,206	2,393	2,439

Sources and methods see Appendix B

NOTE — Sulphur recovered from petroleum and other industrial processes, or derived from spent oxide, zinc blendes and anhydrite, for which no comparable series are available for both pre-war and post-war years, has not been included in the table In 1949/50, in O E E C countries as a whole, supplies of sulphur from blendes, spent oxide and anhydrite, expressed as a percentage of the apparent consumption of sulphur derived from natural sulphur and pyrites, were respectively about 10, 5 and 8 per cent The bulk of spent oxide and anhydrite consumption occurs in the United Kingdom

a All natural sulphur is imported

b Including Yugoslavia The Spanish exports included in this figure relate to 1935

the Soviet Union and by local production of pyrites ; eastern Europe and the Soviet Union together are now, for all practical purposes, self-sufficient in sulphur in all forms.

World consumption of sulphur and sulphur-bearing materials has increased very greatly since before the war.[1] This great expansion in demand was mainly concentrated in two countries. In the United States, consumption, even in 1949, was more than twice as great as it had been in the years 1936 to 1938 and in 1950 was over 2½ times as great. In the United Kingdom, consumption has been rising steadily since the war and in 1950 was about 80 per cent higher than it had been before the war. The apparent consumption of western Germany had still not reached the pre-war level, but was expanding fast, in the rest of western Europe apparent consumption was only 4 per cent higher than in 1936 to 1938.

[1] See Tables 32 and 33. Consumption of natural sulphur and pyrites in the United States and western Europe increased by 70 per cent between 1936-38 and 1950.

Table 33

UNITED STATES SULPHUR SUPPLIES

Thousands of tons, sulphur content

		1936-1938	1948	1949	1950
Natural sulphur	Production	2,420	4,947	4,821	5,275
	Total exports	624	1,316	1,485	1,502
	of which to :				
	United Kingdom	96	360	400	428
	Rest of Europe	189	240	313	240
	Rest of world	339	716	772	834
	Stock changes [a]	+365	−148	−128	−453
	Consumption	1,431	3,779	3,464	4,226
Pyrites	Production	226	395	386	408
	Net imports	179	51	57	98
	Apparent consumption	405	446	443	506
	Total consumption	1,836	4,225	3,907	4,732

Sources and methods see Appendix B

NOTE — Sulphur recovered from zinc or copper blendes or from gas has not been included

[a] The pre-war figure relates to stocks at mines, the post-war figures include change in stocks in transit and in producers' warehouses, as well as in mine stocks. At the end of 1949, mine stocks accounted for 85 per cent of total producers' stocks

Germany has always relied on pyrites for practically all of its sulphur ; domestic production has not changed much since the pre-war years, but there have been considerable fluctuations in western German imports of pyrites. The remaining western Continental countries before the war relied on pyrites for about four-fifths of their sulphur consumption ; the rest was more than covered by Sicilian production.[1] Since the war, Sicilian output has slowly recovered from the low wartime levels, but in 1950 was still 40 per cent below the 1936–38 average ; in the two previous years it had fallen short of European needs. The United Kingdom, on the other hand, even before the war relied on imports of natural sulphur for 45 per cent of its sulphur supplies and by 1948 this proportion had risen to more than 75 per cent : in 1950, imports of pyrites (in terms of sulphur equivalent) were down by nearly 70,000 tons as compared with 1936–38 and imports of natural sulphur, mainly from the United States, were up by 310,000 tons.

The stimulus to this substitution was provided by the cheapening of natural sulphur and in particular United States sulphur—which cost only one-third as much as supplies from Sicily—in terms of the main alternative material, pyrites : the delivered price of Gulf Coast sulphur was, in 1950, only 20 per cent higher than in 1938 while over the same period the c.i.f. price of pyrites imported into the United Kingdom (in terms of dollars) had increased by 95 per cent. The policy of substitution continued to be followed in the United Kingdom until very recently,[2] although sulphur was a dollar commodity and although proved reserves in the United States could hardly last longer than a decade or two even if the rate of exploitation did not increase. The United Kingdom has thus deliberately increased its dependence on American supplies and was bound to be hit hard by any tendency for demand in the United States to outrun supply, or by any move on the part of the producers or the United States Government to protect stocks and reserves.

Both these things happened in the course of 1950. United States production was about 10 per cent

[1] Despite significant imports from the United States, Continental western Europe was on balance a net exporter before the war.

[2] Figures for the consumption of sulphur and pyrites in the manufacture of sulphuric acid are given in the *United Kingdom Monthly Digest of Statistics* as follows (monthly averages in thousands of long tons) :

	1938	*1948*	*1949*	*December 1949*	*December 1950*
Sulphur	6.2	22 3	25.6	27.9	29.7
Pyrites	23.3	18.9	18.8	20.4	17.1

higher than in 1949, but, in spite of the fact that total exports increased only slightly (a decline in exports to Europe being more than offset by an expansion in exports to other areas) there was a fall in producers' stocks between the beginning and the end of the year equivalent to one month's output. At the end of 1950, producers' stocks were down to about six months' production, as compared with the cover of twelve to eighteen months which it had been usual to hold before the war as a protection against sudden depletion of individual working deposits—a danger inherent in the conditions under which Gulf Coast sulphur is mined. It was estimated, moreover, that a continuance of the 1950 rate of production would exhaust the reserves in about twelve years. It might have been expected that, in this situation, American sulphur prices would at last have been raised—if not by the producers themselves, whose profits are substantial even at existing prices, then by Government impost designed to protect a wasting natural asset and to provide the necessary incentive for the exploitation of other more costly sulphur-bearing materials, especially pyrites. In fact, sulphur prices were increased only slightly,[1] but in December it was announced that export shipments would be cut by 30 per cent in early 1951. Wholesalers also reduced current sulphur deliveries to domestic consumers by 15 to 20 per cent as compared with the first three quarters of 1950, but there was no indication that these unofficial reductions would be maintained throughout 1951.

Cotton and Wool

In 1950, western European countries consumed, for the first time since the war, as much cotton as in the years 1934-1938, and 25 per cent more wool. They depended on imports from overseas for all their cotton—half from the United States—and over 80 per cent of their wool. Eastern Europe and the Soviet Union, on the other hand, obtained only one-fifth of their supplies of both materials from outside Europe and Soviet Asia. Wool production has been steadily expanding in central Asia and, in 1950, the Soviet cotton crop substantially exceeded pre-war levels for the first time.

World production of cotton [2] had been continuously expanding since the end of the war up to 1949/50, but only in that year did it surpass the pre-war rate, as food production had restricted acreage during the war years. Immediately after the war, United States consumption was high, about 50 per cent above 1934-38, and stocks accumulated during the war were being reduced to more normal proportions In 1948/49, however, United States consumption fell sharply while production continued to rise, but because of the dollar shortage exports took up only part of the surplus. Hence, while carry-over stocks in the United States rose by nearly half-a-million tons, stocks in the rest of the world continued to fall. In 1949/50, United States consumption recovered and exports rose, but stocks increased still further. Consequently, in the next crop year, the Government restricted the acreage under cotton by 20 to 25 per cent and, in the event, it fell by rather more—34 per cent. Normally, such reductions, because they fall on marginal acreage, are followed by an increase in average yields, but in 1950, owing to unsuitable weather, the average yield fell and the resulting crop was 38 per cent smaller than in the previous year. The recovery in United States consumption in 1950 therefore created a severe shortage even after a drastic reduction of stocks, the Government found it necessary to restrict exports to some 70 per cent of their volume in the previous season. Exports from other countries were increasing, but, with demand rising all over the world, particularly in Japan, prices outside the United States rose by 150 per cent : by January 1951, the price of Karnak cotton was more than two and a-half times the United States price, whereas normally the premium varies between 10 and 30 per cent.

Wool stocks in the hands of the British Commonwealth and United States Governments were high at the end of the war and were expected to hang over the market for a number of years. But in each post-war season world consumption was 10 to 20 per cent higher than world production,[3] and by 1950 world stocks were reduced to normal proportions. The main reason for this was the high level of consumption in the United States which, until 1949, was twice as high as before the war , needless to say, United States consumption in 1949 fell drastically,

[1] The domestic price was about $22 per long ton in the spring of 1951, compared with about $18 in January 1950. The average export price, f.o.b. (as derived from United States trade statistics), rose from $22.70 per long ton in November 1950 (about the same as in January of that year) to $24.90 in January 1951.

[2] See Table 34 overleaf.

[3] See Table 35 overleaf.

Table 34

WORLD PRODUCTION, CONSUMPTION AND TRADE IN RAW COTTON

Thousands of tons

Year	Production			Consumption				Change in World Stocks [c]
	World [a]	United States	Rest of world [a]	World [b]	United States	Western Europe	Rest of world [b]	
1934/35-1938/39	5,305	2,755	2,550	5,105	1,420	1,525 [d]	2,160 [e]	+ 200
1946/47	3,784	1,886	1,898	5,203	2,206	1,222	1,775	−1,419
1947/48	4,473	2,565	1,908	5,219	2,058	1,372	1,789	− 746
1948/49	5,296	3,223	2,073	5,233	1,729	1,473	2,031	+ 63
1949/50	5,878	3,514	2,364	5,477	1,955	1,561	1,961	+ 401
1950/51 [f]	*4,715*	*2,151*	*2,564*	*5,800*	*2,400*	.	..	*−1,085*

Year	World Exports [g]	Exports from		Imports into		
		United States	Rest of world	Western Europe	U.S.S.R., China and eastern Europe	Rest of world [h]
1934/35-1938/39	2,750	1,165	1,585	1,600 [d]	360 [e]	790
1946/47	1,961	780	1,181	1,250	230	481
1947/48	1,749	433	1,316	1,030	305	414
1948/49	2,248	1,045	1,203	1,410	250	588
1949/50	2,525	1,270	1,255	1,490	245	790
1950/51 [f]	*2,200*	*880*	*1,320*			

Sources and methods see Appendix B

NOTE — The original data have been converted into metric tons by taking 1 bale = 216 8 kilogrammes, except for the United States, where 1 bale has been taken as equivalent to 220 kilogrammes The years are 1 August to 31 July

a Excluding China, the U S S R and eastern Europe

b Including consumption of imported cotton in China, the U S S R and eastern Europe, but excluding their consumption of domestically grown cotton

c Including statistical discrepancy arising out of lack of complete comparability between the production and consumption series

d Excluding the present area of the Soviet Zone of Germany

e Including the present area of the Soviet Zone of Germany

f For 1950/51, the estimates of production, consumption and exports from the United States are those given in the January-February 1951 issue of *Cotton—Monthly Review of the World Situation*, International Cotton Advisory Committee The figure for exports from the rest of the world has been estimated by the Research and Planning Division, Economic Commission for Europe

g Excluding trade between the U S S R , China and eastern Europe.

h Including statistical discrepancy between recorded quantities of world imports and exports

Table 35

WORLD PRODUCTION AND CONSUMPTION OF RAW WOOL

Thousands of tons, clean basis

Year	Crop years [a]			Calendar years [b]				
				Consumption				
	World production [c]	World consumption [d]	Change in world stocks	World [d]	United States	Western Europe	Rest of world [e]	Net exports to U.S.S.R. and Eastern Europe
1934/35-1938/39	845	833	+ 12	833	150	480 [f]	138	65 [g]
1945/46	861	792	+ 69	944	339	430	153	22
1946/47	883	986	−103	1,021	321	512	153	35
1947/48	877	1,047	−170	1,066	320	551	160	35
1948/49	891	1,039	−148	1,005	232	567	165	41
1949/50	914	1,054	−140	1,096	289	595	177	35
1950/51	935	1,065	−130	.	..	.	..	.

Sources and methods see Appendix B

a Seasons beginning 1 July

b Pre-war, first year indicated , post-war, second year indicated

c Excluding the U.S.S R and eastern Europe

d Including consumption of imported wool in the U S S R and eastern Europe, but excluding their consumption of domestically produced wool

e Excluding net exports to the U S S R and eastern Europe.

f Excluding consumption of raw wool in the present area of the Soviet Zone of Germany.

g Including consumption of raw wool in the present area of the Soviet Zone of Germany

and thus the long-term deficit in world production was temporarily concealed. With the upturn in business activity in 1950 United States consumption recovered, consumption in other countries continued to increase and the deficit was suddenly revealed. Prices rose rapidly throughout 1950 and did not ease until February 1951, by which time they were nearly three times as high as in December 1949.

Rubber

World production of natural rubber, which is almost wholly concentrated in south-east Asia, recovered rapidly after the war and by 1948 was about 50 per cent above the pre-war level.[1] Up to 1949, world consumption of rubber (all rubber, natural or synthetic) was also rising, a decline in the United States from 1947 onwards being offset by a rise in the rest of the world ; even in 1947 western European consumption was higher than it had been before the war. Almost the whole of the decline in United States consumption between 1947 and 1949—135,000 tons, or 12 per cent—was concentrated on synthetic rubber, the production of which was steadily reduced. In 1949, the increase in world consumption outside the United States was insufficient to offset the decrease in that country and, although strategic stock-piling and increases in exports to eastern Europe and the Soviet Union helped to prevent a more drastic fall in world demand, world production ceased to expand and the price of natural rubber fell substantially.

United States consumption began to recover at the beginning of 1950, but production of synthetic rubber was still falling and deliveries of natural rubber by producers were at exceptionally low levels owing to political disturbances in both Malaya and Indonesia ; thus in the first three months of 1950 the price rose by about 30 per cent. The rising demand for current consumption during the rest of the year was met by reversing the trend of synthetic production and by an extraordinary expansion in the production of natural rubber, especially on Indonesian small holdings. But stock-piling demands by government and industry became almost unlimited and dollar prices, which were rising continuously, shot up through the summer and by November were four and a-half times the August 1949 price ; since then, unlike sterling prices, they have not changed substantially.

[1] See Table 36.

Table 36

WORLD PRODUCTION AND CONSUMPTION OF RUBBER

Thousands of tons

Year	Production			Consumption					Change in Strategic Stocks	Change in Other Stocks [d]
	World [a]	Natural	Synthetic	World [b]	U.S.A.	Western Europe	Rest of world [c]	Net exports to U.S.S.R. and eastern Europe		
1936-1938	1,016	1,012	4	1,050	523	319 [e]	137	71 [f]	..	— 34
1946	1,671	851	820	1,492	1,056	264	160	12		+179
1947	1,848	1,280	568	1,763	1,140	349	218	56	+200	—115
1948	2,090	1,549	541	1,930	1,086	463	248	133	+100	+ 60
1949	1,959	1,512	447	1,918	1,005	486	269	158	+100	— 59
1950	2,423	1,880	543	2,286	1,279	562	325	120	+120	+ 17
1950 Fourth quarter (annual rate)	2,780	2,130	650	2,435	1,287	620	370	158		

Sources and methods see Appendix B

[a] Excluding the U.S.S.R. and eastern Europe

[b] Including imports of the U.S.S.R. and eastern Europe, but excluding their consumption of domestically produced rubber

[c] Excluding net exports to the U.S.S.R. and eastern Europe

[d] Including statistical discrepancy between recorded data on production, consumption, and estimated change in strategic stocks

[e] Excluding consumption of rubber in the present area of the Soviet Zone of Germany

[f] Including consumption of rubber in the present area of the Soviet Zone of Germany

3. The Prospective Supply Position in 1951

A further drawing on stocks cannot be expected to provide much relief to the raw material shortages facing European industry. Stocks of coal and steel are always low in relation to consumption and provide little if any margin for reduction. Stocks of timber are already so low in many countries as to interfere with the continuity of production and, in general, few governments or industries are likely to risk further depletion of stocks of raw materials at a time when the prospects of subsequent replenishment are most uncertain. The supplies necessary to maintain and expand industrial production in Europe will therefore have to come from its own current output of materials and from imports.

The supply position in eastern European countries and the Soviet Union cannot be examined in detail because of the lack of information, particularly on current developments. Since these countries have been accustomed to rely on their own resources rather than on imports, their plans attempt to provide for a balanced development of production at various stages in the production process. It is, however, likely that, in countries where industrialization is proceeding so rapidly, various industries will from time to time get out of phase with one another, thus causing temporary bottlenecks in particular materials.

The most serious difficulty experienced in eastern Europe recently appears to be in the expansion of petroleum production. Aggregate output in Rumania, Hungary and Poland, although in 1950 10 per cent above the previous year's output, was still 15 per cent lower than in 1938. It is not known whether these eastern European countries are net exporters or net importers of petroleum in their trade with the Soviet Union, but output in eastern Europe and the Soviet Union together was only 17 per cent higher in 1950 than before the war. During the year, efforts were made in both Hungary and Poland to reduce the less essential uses of petrol and lubricating oils : in Hungary this took the form of a requisitioning of all private cars. The great expansion in the production of diesel oil in the Soviet Union suggests that in the long run diesel engines will increasingly be substituted for the less economical petrol engines in motor lorries and tractors ; experiments are also being made with electrically driven tractors.

The raw materials problem as it presents itself in eastern Europe and the Soviet Union has, however, little influence on supply and demand in the rest of the world, since their trade with countries outside the area has been reduced to a minimum, except in rubber and wool, and even in these commodities their imports represent a relatively small part of world production. In general, levels of raw material consumption per head in the area are relatively low—about two-thirds of western European *per capita* consumption in the case of steel, about one-half for most non-ferrous metals and cotton and an even smaller proportion in the case of wool.

Coal Supplies

Twelve million tons of American coal are expected to arrive in western Europe during 1951, and imports from Poland may also increase by about 1 million tons, returning to their 1949 level. High transport costs could be reduced all round by eliminating cross-traffic, but importers are reluctant to give up their present contracts, partly because of price concessions and partly for fear of creating precedents. Efforts are, however, being made to distribute United States coal rationally and to share out the extra costs of the imports.

Manpower in British pits has begun to rise slightly and by March 1951 was 2 per cent above the record low level at the end of November 1950. It is significant that this reversal of the previous trend followed small wage increases in October 1950,[1] and that the net increase began mainly as a result of a drop in the rate at which miners were leaving rather than a rise in the intake. Output per man-shift continues to increase steadily, but slowly, and the Government expects total production in 1951 to be 3 to 6 million tons greater than in 1950.

In western Germany, output is officially [2] expected to be 12 million tons higher than in 1950. This would still leave output well below the pre-war volume, as would also be true, of course, of the production level forecast for the United Kingdom.

[1] Wages were again increased in February 1951.

[2] Derived from the report to the O.E.E.C. of the Government of the Federal Republic on the 1950/51–1952/53 programmes, Bonn, February 1951.

All told, increased production within the area and imports from outside sources can scarcely permit coal consumption in western Europe to rise by more than 5 per cent in 1951, particularly as stocks were run down in 1950 and in some instances need to be replenished. It is extremely difficult to estimate the extent to which the limit on supplies of coal will also limit industrial production. In some countries, such as the United Kingdom, non-industrial consumption is large and can be restricted so that a given proportionate increase in total supplies implies a larger increase in supplies for industry ; in others, less coal is consumed in private homes and limitations on the supplies to industry will be correspondingly more rigid. However, even over a short period there is no very close relationship between coal consumption and industrial output, owing to the great scope for technical economy and the wide and variable use of coal for central heating in factories. A major restriction on industrial production would be a failure to produce sufficient electricity, but here again much depends on the degree of priority given to power stations in the allocation of coal supplies and on vagaries of the weather which determine the supplies of water to hydro-electric reservoirs.

Steel and the Shortage of Steel-making Materials

At the end of 1950, European demand for steel was running ahead of supply, prices were hardening and order books lengthening, although production by the steel-consuming industries had not so far been hampered by an actual shortage of the commodity. On the basis of present plans and capacity, including new plant coming into operation, crude steel production in Europe as a whole in 1951 might be expected to reach about 70 million tons, compared with an actual output of 61 million tons in 1950 and 55 million tons in 1949. Roughly two-thirds of this potential increase would come from the fuller utilization of existing capacity in several western European countries—France, Belgium and Luxembourg—where output was low in 1950, and in western Germany, whose production could be raised to some 13.5 million tons. Other European countries produced nearer to capacity in 1950 and could not therefore raise output so much in the short run. In the United Kingdom, which alone accounted for one-quarter of European total output in 1950, no significant expansion can be expected until late in 1951, when new plant, estimated to yield about three-quarters of a million tons, comes into operation.

An increase of 9 million tons, or about 15 per cent, in 1951 implies that the utilization of capacity is not held down by a shortage of steel-making materials. The prospects are not favourable : a shortage of coke was already limiting western German steel output at the beginning of 1951, and the shortage of scrap has now become universal, although as yet actually affecting current production only in isolated instances.

The appearance of a scrap problem, affecting the steel outlook in both eastern and western Europe, follows the exceptionally high rate of scrap consumption[1] which was made possible in recent years by supplies from war damage and was encouraged by the shortage and relatively high price of coke. In 1949, western Germany had exported 3 million tons of scrap, two-thirds of it to the United Kingdom. The progressive exhaustion of war scrap and the rise in western Germany's own steel output are reducing supplies from that source : scrap exports to the United Kingdom in 1950 were 2 million tons, of which three-quarters was in the first half of the year ; in 1951 total exports from western Germany are unlikely to exceed 1 million tons. War scrap is, of course, only a part of " old scrap " and the latter in turn only a part—roughly one-half in western Europe in 1950—of all the scrap used in steel production, and, even if methods of collection are improved, it is unlikely that supplies of other scrap will rise sufficiently to offset the fall in war scrap, as these other supplies consist of " circulating " and " process " scrap arising as waste from current production in the steel industry itself and in the consuming industries. This means that an increase in steel production of the order of 9 million tons would have to be fed mainly by pig-iron—that is, from an increase in supplies of iron ore and coke.

Iron ore in turn, however, presents a serious problem.[2] European consumption was around 31 million tons, metal content,[3] in both 1949 and 1950.

[1] As noted in Chapter 2, a comparison of pig-iron and steel production in the Soviet Union suggests that there, too, the ratio of scrap consumption to steel production has substantially increased.

[2] For a more detailed discussion of this problem, see " The Coal and Steel Industries of Western Europe ", *Economic Bulletin for Europe*, Vol. 2, No. 2.

[3] All figures on iron ore in this section are given in terms of metal content

European production also remained relatively constant at only a slightly lower level, imports from overseas sources outweighing exports of Swedish iron ore to the United States. Assuming that these exports —at present running at an annual rate of about 1.2 million tons—do not increase, European countries may be able to raise their net imports from outside sources,[1] although they face strong competition because of rising demands in the United States. But by far the greater part of the increase in Europe's consumption requirements will have to be met from increased production within Europe. There is no technical reason why, in time, European production should not rise substantially. There are considerable reserves of high grade ore in Sweden and of poorer grades in France, yet Swedish output was still no greater in 1950 than in 1938, while French production was 1 million tons lower than in 1938, when it was already well below the 1929 level. In fact, however, there is little prospect that the investment in mines, houses for miners, and transport equipment necessary for increased production could be carried out sufficiently fast to meet European needs in full in the near future. Some expansion in iron ore production from existing capacity can be expected in these and other European countries, but scarcely enough both to compensate for the scrap shortage and to supply the additional needs arising from a rapid expansion in steel output.

In face of the general shortage of coal, it will also be difficult to provide enough coke to support the potential increase in steel production, particularly if more ore is to be used in place of scrap : this difficulty may be eased, however, by imports of coking coal from the United States, and—in countries where coal fit for coking is also used for other purposes—by giving coke ovens priority in supplies. It is, moreover, possible by technical adjustment to produce metallurgical coke from coal not normally regarded as "coking coal". Western European countries produced 65 million tons of coke in 1950 and are planning to increase output to 78 million tons in 1951. Despite this increase, excess coking capacity will still exist in some countries.

Thus, it would be possible to utilize fully European steel-making capacity in 1951 and to achieve the implied increase of 14 per cent over 1950 production if very energetic measures were taken to produce more ore and coke and to use ore, of whatever varieties are available, in place of scrap. In addition, although plans are being made in a number of countries to stimulate scrap collection, there is great scope for further improvement and more use could be made of the price mechanism. All these measures require a substantial degree of international co-operation : if they fail, steel output is unlikely to rise much above the level of the last quarter of 1950.

Timber

It appears, from the trend of deliveries against past contracts and from contracts for future delivery recently made, that the United Kingdom wishes to increase total imports of sawn softwood from 4 to 8 million cubic metres in 1951, mainly for stock-piling purposes. If extra supplies of timber were not available from outside Europe, such a big increase in the demand of one country—equivalent to about 40 per cent of the total export surplus of the European exporting countries in 1950—could have serious effects on supplies for industry elsewhere.

But in fact it seems likely that this decision has merely made timber dearer rather than reduced the supplies available for continental Europe. Western Germany may perhaps get somewhat less in 1951 than would be needed to allow its house-building programme to continue expanding at the current rate, but this will be mainly due to the country's difficult payments position in the European Payments Union rather than to an actual physical shortage.

The saving factor is the likely increase in the North American export surplus. Production of timber in both Canada and the United States is expected to increase somewhat, and the curtailment of non-essential building should make the United States demand for Canadian timber lower than it was during the housing boom of 1950. The United Kingdom has already placed orders in Canada for about 2½ million cubic metres, including amounts still to be delivered on old contracts, and expects to be able to buy as much as it wants, though at very high prices—about £55 per standard f.o.b. plus freight of £35. In general, it does not seem likely, if shipping is available, that supplies of timber will limit European production in 1951 to any greater extent than in previous years.

[1] British imports from Newfoundland, which fell from 300,000 tons in 1949 to only 30,000 tons in 1950, are expected to rise again to 520,000 tons in 1951.

Non-ferrous Metals [1]

The transformation of non-ferrous ores into finished metals is a long and complicated process involving many different stages of production. At the first stage, the ore, which generally has a low metal content and may contain more than one metal, is reduced to concentrates, partly in order to save transport costs. From these, metal is obtained by smelting ; there follows the stage of refining to various degrees of purity. Bottlenecks can occur at any of these points, which, because considerable international trade occurs at each stage, are often widely separated geographically. In the case of most of the non-ferrous metals, the bottlenecks at present occur at the first stages of the productive process, the mining of ores, which are in general situated outside Europe. There is thus little or nothing that European governments can do within their own countries which can directly increase their supplies of metal.[2]

The expansion of world copper production is largely conditional upon the installation of new equipment, both in mines now in operation and in those marginal mines which can profitably be operated at the present level of prices. Production in the United States is unlikely to continue to expand as fast as in 1950, when the rise recorded was high, partly because output in 1949 was low, and little further increase seems to be expected in 1951. In Africa, coal supplies and railway facilities set limits to copper production, while in Chile the increasing proportion of sulphide ore gives rise to problems at the subsequent stages of production. In view of these limitations, world copper production in 1951 is unlikely to rise by more than some 5 to 7 per cent above the 1950 level. No more than this rate of increase can be expected in the case of all the other main non-ferrous metals except aluminium. Tin prices are relatively high, but production is unlikely to respond sharply, partly because of uncertainty arising out of the high proportion of output going into stock-piles and partly for technical reasons : new dredges are being installed and old ones rehabilitated in Malaya and Siam, but others are due for major repairs, and in Malaya a persistent shortage of electricity restricts production in some of the mines. In the case of zinc, the output of small producers is an important part of the total, and recent price increases should help to maintain expansion at about the rate of the last two years. The outlook for aluminium is very different, chiefly owing to the large expansion of capacity being undertaken in the United States and Canada. Although this expansion will not mature for several years, it is expected to raise output in these two countries by 170,000 tons already in 1951 and, together with increases in capacity elsewhere, to increase world production by some 15 per cent over 1950.

In addition to primary production, production from scrap contributes importantly to the supply of non-ferrous metals,[3] especially copper and lead and, in the United States, tin. Secondary production of these metals from old scrap in the United States in 1948, for example, amounted to about 60 per cent of primary lead production, 40 per cent of primary copper production, and 30 per cent of primary tin production. Comparable figures for Europe are not available, but secondary production of lead and copper is known to be greatly above pre-war levels in the United Kingdom. Further substantial increases in the rate of collection or use of scrap in European countries appear unlikely within the next year or so : the greater part of the copper and lead scrap left over from the war has already been used, and the construction of new de-tinning plants would be necessary before secondary production could contribute materially to European tin supplies.

The Supply Position in Sulphur

The figures in Tables 32 and 33 show that the production and policies of the United States are almost the only determinants of supplies to Europe of natural sulphur from the outside world. The supply outlook in the United States appears to reflect, on the one hand, the need to prevent further depletion of working stocks and the rapid exhaustion of underground reserves and, on the other hand, the hesitation of producers to undertake costly new investment in the expansion of capacity because of uncertainty whether

[1] See 1951 estimates in Table 31.

[2] The one exception to this is aluminium. It would not be difficult to increase the supply of bauxite, but in any case only about one-third of the bauxite mined has recently been used to produce aluminium, the rest being used by the chemical industries ; this proportion could, if it were necessary, be increased. The controlling factor in this case is the availability of abundant electricity.

[3] The supply of old scrap from aluminium is, however, relatively small, since it has come into widespread use much later than the other metals ; most of the secondary aluminium production in recent years has been from scrapped military aircraft.

demand will continue at present levels over the long run. Although production in the first quarter of 1951 ran substantially above the 1950 average rate, it is not expected to be higher than in 1950 over the year as a whole. This implies a considerable reduction, compared with the levels reached in the latter part of 1950, in supplies available for domestic use and export, particularly if, for reasons given in section 2, there is to be no further consumption of stocks. A large part of this reduction is being taken out of exports : allocations for all " friendly nations " for the second quarter of 1951 were finally fixed at a level equivalent to an annual rate of 1 million tons, compared with actual exports of 1½ million tons in 1950. The difference is approximately equal to the amount drawn from stocks in 1950, indicating that the total amount available for current domestic use in the United States will be about the same as in that year, unless stocks are restored to higher levels.

Of the total export allocation by the United States for the second quarter, 38 per cent was earmarked for the United Kingdom, thus providing it with 90 per cent of its average quarterly rate of imports from the United States in 1950. The amount remaining for other countries would thus imply a cut of more than 40 per cent ; however, as previously noted, other western European countries have not developed the same narrow dependence on United States supplies as the United Kingdom.

Other sources of sulphur are unlikely to provide any appreciable relief to the shortfall of European imports from the United States. Mechanization would be required to increase Sicilian output of natural sulphur, and the expansion of pyrites production in Spain, the largest supplier, would also require more machinery, as well as more electric power. Similarly, pyrites production in Norway is limited by a shortage of electricity. Pyrites production could be greatly expanded in the United States, but the investment required will take several years to mature. In any event, it would be impossible immediately to absorb substantially larger supplies of pyrites, as some time is required before sulphur-burning acid plants can be converted to use pyrites or new plants established. The recovery of sulphur from town gas and petroleum refineries is being developed, but these sources now provide only about 5 per cent of total western European consumption. The uses of other sulphur-bearing materials—zinc-blende and anhydrite—are also being further developed, mainly in the United Kingdom, but these cannot be counted upon to provide large-scale relief to the present shortage within less than about two years. It is difficult to estimate the balance of supplies from all these sources in 1951, but in the aggregate sulphur consumption in Europe can hardly increase significantly over 1950, especially as stocks were being drawn upon during that year. In the United Kingdom, deliveries to consumers have already been cut by one-third of the rate of their consumption during the period from April to September 1950 ; Italy is able to rely on its own production, and the position of most other European countries will fall between these two extremes.

Textile Fibres

It is unlikely that western Europe will be able to increase its cotton consumption in 1951 above the level of the previous year, even if stocks are run down. Acreage restrictions in the United States have been removed, and the 1951/52 crop is expected to be about 3½ million tons, as in 1949/50 ; but, owing to the continued expansion of American demand, it is unlikely that even this output will be sufficient to allow exports to return quite to the level reached during 1949/50 ; stocks are low both in the United States and in Europe and are unlikely to be further reduced for fear that the new crop may fail to come up to expectations. A definite easing of the cotton situation therefore seems improbable before the calendar year 1952.

World production of wool in the 1950/51 season is expected to be only slightly higher than in 1949/50. There are long-term difficulties in expanding output and, in the short run, the present high prices can have little effect, as wool is not clipped from the youngest animals. Stocks could probably still be reduced, but if strategic stock-piles take 20,000 to

Notes to Table 37

Sources and methods see Appendix B

a Excluding strategic stocks

b For tin, latest figures available ; generally end December, except for United States, which are end November For zinc consumers, United States, end November

c Producers' stocks figure not available, but assumed to be equal to that at end 1948

d Including main world producers other than Australia, Japan, Norway, Sweden, the U S S R and Yugoslavia.

e Including concentrates or metal afloat

f For cotton, stocks relate to 1 August , for wool, 1 July

g Excluding United States Government stocks in all years, United Kingdom Government stocks from 1948 and French Government stocks from 1949

Table 37. — VISIBLE STOCKS OF SELECTED RAW MATERIALS [a]

Stocks at end of year — *Thousands of tons*

Commodity	Country	Coverage of series	1947	1948	1949	1950 [b]
Aluminium	United States	Primary metal at reduction plants	14	12	26	
Copper	British countries	Concentrates		31	29	37
	United States	Blister and refined, at producers	255	231	286	
	United States	Refined, at consumers	384	344	322	263
	United Kingdom	Blister and refined. Stocks held by producers, Government and consumers	138 [c]	148	145	115
	Other British countries	Blister and refined, at producers	..	71	93	68
		Total excluding concentrates	..	794	846	.
	United States	Refined, at producers	69	87	105	44
	Other producers [d]	Refined, at producers	131	159	134	127
		Total.	200	246	239	171
Lead	British countries	Concentrates	.	21	26	28
	United States	Ore, matte and lead in process, at smelteries	70	69	87	63
		Total concentrates, etc.	..	90	113	91
	United States	Base bullion and refined, at producers	46	64	96	61
	United States	Refined, soft and antimonial, at consumers	67	88	74	92
	United Kingdom	Refined, held by Government and consumers	41	20	52	63
	Other British countries	Refined, at producers		33	20	21
		Total excluding concentrates	.	205	242	237
Zinc	British countries	Concentrates		192	227	243
	United States	Metal, at producers	62	19	85	8
	United States	Metal, in transit to, and at, consumers	81	97	84	66
	United Kingdom	Metal, at producers and stocks held by Government and consumers	33 [c]	48	66	38
	Other British countries	Metal, at producers	..	17	21	12
		Total excluding concentrates	.	181	256	124
Tin	United States	Concentrates [e]	23 6	24 8	24.4	20 3
	United Kingdom, Belgium and Netherlands	Concentrates [e]	13 1	15 6	11 3	7 9
	Rest of world	Concentrates [e]	20 8	14 6	16 5	10 9
		Total	57	55	52	39
	United States and Canada	Producers' stocks of metal [e]	34.1	27 5	25 0	27.0
	United Kingdom, Belgium and Netherlands	Producers' stocks of metal [e]	10 5	16 4	16 4	8.7
	Rest of world	Producers' stocks of metal [e]	12.6	13 0	20 7	8.0
		Total	57.2	56.9	62 1	43.7
	United States	Consumers' stocks of metal	14 9	14 9	13 5	23 3
	Rest of world	Consumers' stocks of metal	7 7	9 4	6 5	14 8
		Total	22 6	24 3	20 0	38 1
		Total producers' and consumers' stocks of metal	79 8	81 2	82 1	81 8
Sulphur (*natural*)	United States	Producers' stocks, at mines, in transit & in warehouses	3,425	3,277	3,149	2,696
	United Kingdom	Government and consumers' stocks	84	86	101	82
Cotton [f]	United States	Producers' and consumers' stocks	557	678	1,163	1,506
	United Kingdom	Producers' and consumers' stocks	441	303	352	303
	Rest of world	Producers' and consumers' stocks	2,632	1,803	1,333	1,467
		Total	3,630	2,784	2,848	3,276
Wool [f] (*clean basis*)	World	Government and exporters' stocks	502	321	232	65
	World	Importers', merchants' and consumers' stocks	675	682	639	697
		Total.	1,177	1,003	871	762
Rubber [g]	Producing areas	Natural	233	239	241	249
	United States	Natural	131	144	108	89
	United States	Synthetic	63	117	100	55
	United Kingdom	Natural and synthetic	131	53	41	40
	Rest of world	Natural and synthetic	385	361	359	426
		Total.	943	914	849	859

(For notes, see opposite page)

30,000 tons, as expected, supplies available for current consumption will actually be less than in 1949/50. It is in any case certain that the rate of world consumption will have to be reduced from the high level of the calendar year 1950. In the calendar year 1951 western Europe may be able to consume as much as in 1950, by reducing stocks, but after that the stocks can hardly be reduced further.

The shortage of sulphuric acid will hit the rayon industry severely : in the United Kingdom, despite drastic reductions in supplies of acid for production of fertilizers, it is expected that production will be cut by 15 per cent, and in other western European countries apart from Italy, it is likely to be reduced in similar proportions. This reduction of rayon output and the limitations on cotton and wool supplies mean that total European textile production in 1951 will probably be significantly below that of 1950.

Rubber

Despite the prevailing high price for the natural product, the prospective supply position of rubber, including synthetic rubber, is likely to be considerably easier than that of most other major raw materials. The reactivation of plant in the United States is expected to raise synthetic production from 540,000 tons in 1950 to about 800,000 tons in 1951 ; the output of natural rubber is also likely to be higher and, even if it does not exceed the rate of the last quarter of 1950, world output of both types of rubber combined should rise by some 25 per cent in 1951. Supply is therefore unlikely to continue to limit industrial consumption, even allowing for the amounts set aside in official stock-piles under present programmes.

Raw Material Supplies and Industrial Output

The most basic shortages in Europe are likely to be those of coal, steel and, in the United Kingdom, sulphur. Coal enters so universally into all production that, if coal were the sole limiting factor, it would be impossible to predict the consequential shortfall of total production without making rather explicit assumptions as to its allocation between different industries. But, whatever happens to coal supplies, it seems quite certain that the output of steel, owing to a shortage of iron ore, will be insufficient to allow either the steel industry or the wide range of metal-using industries to contribute their full quota to the 13 per cent expansion of industrial production estimated to be possible in Chapter 2. It is unlikely, moreover, that this shortfall of output in one group of industries could, in the short space of a year, be compensated by a movement of labour to other industries with adequate materials.

The true shortage of coal and steel may even be greater than will become apparent in the course of 1951 in the sense that particular types of production, which might have been limited by a shortage of these two basic commodities, may already have been held down by a lack of the more specific non-ferrous metals. As has been seen, the increase in world supplies of all the non-ferrous metals except aluminium will almost certainly be modest compared with the potential demand. How much of this increase in supplies will accrue to Europe can only be conjectural. Two factors quite outside the control of European countries will determine Europe's supplies of imported materials : first, the speed with which armaments production in the United States develops and the extent to which other production is cut ; second, the extent of United States stock-piling, a non-economic factor depending on the United States Government's judgement of the world strategic situation. It has been mentioned before that stock-piling acted as an anti-cyclical mechanism in 1949 but in 1950 accentuated inflationary pressures all over the world. It seems likely that United States stock-piling will be on a smaller scale in 1951 than in 1950, partly because it was realized that a more ambitious programme would interfere seriously with the development of industrial production in western Europe.

The following figures show rough estimates of the increase in world supplies for consumption and normal stocking in 1951, compared with the increase in 1950 over 1948 : [1]

(Thousand tons)

	Increase in world production		Increase in additions to strategic stocks		Increase in world supplies available for current use and normal stocks	
	1950 over 1948	*1951 over 1950*	*1950 over 1948*	*1951 over 1950*	*1950 over 1948*	*1951 over 1950*
Aluminium	180	205	—	100	180	105
Copper . .	220	140	190	−50 to −80	30	190 to 220
Lead .	255	65	145	−120 to −130	110	185 to 195
Tin . .	15	8–13	21	−12 to −23	−6	20 to ·34
Zinc	230	130	65	−35 to −65	165	165 to 195

[1] A comparison of 1950 with 1949 would be less relevant because of the temporary fall in world activity in that year. For total supplies, see Table 31.

The estimates of additions to stock-piles are subject to a wide margin of error. Nevertheless, it seems likely that world supplies available for current use in 1951 will be in every case a few per cent higher than actual consumption in 1950 ; the excess of the supplies available in 1951 over the supplies currently available in 1950 is likely to vary from 8 per cent in the case of aluminium, to 13 to 22 per cent in the case of tin. A prudent policy of cutting non-essential uses could permit other production to be carried on without undue difficulty in 1951, if the supplies are prevented from going into private hoards. This proviso is important. So long as governments, producers, merchants and fabricators continue to hold on to their stocks because they expect further price inflation and shortages, the increased supplies will be wasted and there will appear to be, and for all practical purposes there will be, shortages. In other words, in the case of non-ferrous metals, probably more depends on expectations than on anything else.

In the case of textile fibres, it is possible to be slightly more dogmatic : the supply situation in cotton, wool and rayon is such as to make an actual reduction in total European textile output almost certain. Here again, it is unlikely that there are any great possibilities of compensating for this decline in welfare by diverting labour to other consumers' goods industries.

In general, it is unlikely that large-scale unemployment will develop in Europe as a result of the material shortages, for it is one of the characteristics of an inflationary situation that employers hold on to labour for which they currently have no use for fear that it will no longer be available when the shortages disappear. They are able to do this without cost to themselves by passing on to consumers the increase in costs which follows a reduction in productivity when the same labour force is employed on a reduced quantity of raw materials. Thus the most likely result for Europe as a whole is that productivity will rise by much less than would technically be possible. Moreover, as for obvious reasons the shortages are likely to affect particularly the expanding, and therefore presumably more efficient, industries (rayon, fertilizers, paper, engineering) they are likely to affect adversely the long-run development of European industry.

It goes without saying that it will be the civilian rather than the military sectors of the metal-using industries that will be expected to bear the brunt of any shortages : in general, the evidence so far suggests that western European countries will make efforts to maintain investment in fixed capital at about the 1950 level. The conclusion seems inescapable that it will be mainly the household consumer or the foreign importer who will feel the impact of the shortages of raw materials of all kinds. In some countries there will be strong pressure, for balance-of-payments reasons, to maintain exports of metal goods and of other goods to take their place, but in other countries the demands of the home market may tend to receive preference in the distribution of available supplies.

4. The Basic Causes of the Strain on Raw Material Supplies

United States Consumption

It is shown in Table 38 that the United States' share in world consumption of non-ferrous metals increased from 1936-38 to 1950 from 30 per cent to about 60 per cent for aluminium, from 30 per cent to about 50 per cent for copper and lead, and from 40 per cent to 50 per cent for tin and zinc. Already before the war the United States consumed half the world's supplies of rubber and wood-pulp, and by 1950 these proportions had further risen, that for wood-pulp to two-thirds. Equally large increases occurred in the United States' share of world consumption of cotton and wool. These changes, which were, of course, due to the fact that the national income of the United States rose so much more than that of other countries over this period as a whole, had a fundamental effect on trading relations between the United States and the rest of the world, as is indicated by the following figures :

United States net exports (+) or net imports (-)
(Thousand tons)

	1936-1938	*1949*	*1950*	*1950 4th qtr* [a]
Iron and steel	+1,910	+3,700	+970	-1,230
Iron and steel scrap	+2,970	— 575	—465	-1,300
Copper ore, concentrates and metal.	+ 88	— 383	—375	
Copper scrap	+ 13	+ 1	— 23	
Lead ore, concentrates, metal and scrap	+ 5	— 381	520	
Zinc ore, concentrates, metal and scrap	— 14	— 195	—347	
Wool (clean basis)	— 104	— 190	- 323	

[a] Annual rate

Table 38

CONSUMPTION OF SELECTED RAW MATERIALS

Commodity	*Index numbers 1936-1938 = 100* Consumption in 1950		Percentage share of United States in world consumption [a]	
	United States	Western Europe	1936-1938	1950
Hard coal and lignite [b]	110	104	..	..
Crude petroleum	209	176 [c]	67	69
Finished steel	200	105	..	.
Aluminium	680	160	30	62
Copper	215	100	32	54
Lead	180	65	28	52
Tin	120	85	39	50
Zinc	190	90	37	52
Cotton [d]	140	100	28	36
Wool	190	125	18	26
Rayon	425	185	21	42
Sulphur (natural)	295	160	53	70
Pyrites	125	100		..
Rubber	245	175	50	56
Sawn softwood	170	88 [e]	..	
Wood-pulp	225	101	48 *f*	68 *f*

Sources The data have been derived from other tables in this chapter and in Appendix A relating to each commodity shown

a Excluding the U S S R and eastern Europe, but including net exports to these countries

b Hard-coal equivalent.

c 1938 = 100

d Pre-war 1934/35-1938/39 , post-war 1949/50

e 1934-1938 = 100

f Wood-pulp and paper products , the figures relate to 1937 and 1949

For each of the commodities shown, the United States had become a net importer on a substantial scale by 1950, although in the case of steel this did not occur until the last quarter of the year. The changes for steel and wood-pulp have a direct effect on Europe, which exports both commodities, and in the other cases they represent an increased claim on common sources of supply ; the change was particularly significant in the case of ferrous scrap, where the large pre-war United States exports to which Europe had become accustomed were replaced by substantial net imports.

These increases in the share of the United States in world consumption and imports have made world demand even more sensitive than previously to fluctuations in United States industrial activity : while Europe maintains a steady rate of industrial expansion there will always be a strain on world supplies of industrial materials whenever an American boom is superimposed.

As seen in the individual sub-sections of section 2, the United States recession of 1949, and the later deflation in some European countries, especially France, weakened markets and retarded the increase in production of all materials. However, world industrial capacity, already much greater than before the war, continued to expand, so that the process of long-term readjustment of the supply of raw materials to industrial requirements was brought to a halt. Then, as appeared with monotonous regularity in the case of all the materials discussed in section 2, the precarious balances of 1948 and the spurious surpluses of 1949 gave way to sudden shortages when the recovery of demand brought world industrial capacity nearly fully into operation in 1950. The events of 1949 turned attention away from long-term problems such as those of sulphur, wool and steel scrap, and prices, at least in these instances, were too low in relation to the underlying shortages.

The Temporary Nature of Present Demands

Many of the present shortages are directly attributable to strategic demands. Some evidence of the order of magnitude of these factors is provided by the following estimates of percentages of world supplies of non-ferrous metals which will be required for these two purposes in the United States and western Europe in 1951 as compared with 1950 : [1]

	Strategic stock-pile (Percentage of world supplies)		*Armaments production* (Percentage of world supplies)	
	1950	*1951*	*1950*	*1951*
Aluminium	—	7	5-7	20-24
Copper	8	5-6	4-5	10-13
Lead	9	1-2	4-5	8-11
Tin	23	12-18	3-4	6-9
Zinc	6	3-4	3-4	12-14

It is fairly clear that, while such a large proportion of total world supplies is intended for purposes which producers may regard as temporary, supply will continue to prove inelastic. If world full employment had been continously maintained, rearmament programmes could have been carried out only by diversion of resources which were previously engaged in civilian production, and there would have been no net increase in the demands for materials. But, things

[1] The methods of compilation of these estimates are described in Appendix B.

being as they were, the rearmament boom has also stimulated the output of civilian goods, and, in all countries where total resources were not previously fully employed, there has been a substantial net increase in raw material requirements. Primary producers had, in 1949, been adjusting themselves to a level of world demand below full employment and thus the rearmament demands created a world shortage greater than would otherwise have been the case.

Policies of European Countries[1]

European countries have it within their power to increase the production of all materials which are normally produced within the area, but in many cases the output of these is held down by failure to adopt suitable economic policies. Generally speaking, compared with pre-war, the output of basic materials in Europe has risen substantially less than industrial production[2] and in some cases - such as coal, sulphur, timber and iron ore - it has fallen absolutely. Europe's resources of coal and iron ore are sufficiently large and accessible to cover its requirements. In both British and German coal mines still more investment is needed and, despite the improvement that has already occurred, much remains to be done to improve miners' conditions of work relatively to those in other occupations. Installation of new machinery in British pits has fallen off since 1948, and no serious efforts to install new machinery in the Ruhr have been made since the end of the war. In the United Kingdom, the relative wages of miners are no higher than in 1914 and their present earnings are normally no greater than those of printers and many operatives in the engineering trades. In the Ruhr, miners earn only 15 per cent more than the average of all male industrial workers. In both countries, wage systems are antiquated and badly designed from the point of view of incentives. In iron-ore mining, as already seen, the Lorraine fields require mechanization and houses for new workers. In Sicily there is enormous scope for improvement in technical methods as regards both the collection and the refining of sulphur.

In a number of cases, greater use of the price mechanism would assist in bringing about the necessary increases in production. Although price control of industrial materials is a valuable weapon in the struggle against cost inflation, it is an unfortunate paradox that these controls have also the effect of inhibiting necessary adjustments and may lead to waste of resources or hinder the expansion of production. Coal is still mined at a loss in a number of British fields, and the internal price in the United Kingdom is clearly below the price which British coal would fetch if it were offered on equal terms to other European countries and to British consumers. The prospective imports from the United States in 1951, which may be taken as some measure of the average European deficit, amount to only 2 per cent of total European production : it does not seem that a very large rise in the average European price would be required to bring about the necessary economies to eliminate such a small percentage deficit. An increase in the price would enable higher wages to be paid to miners and thus, at least in the case of the United Kingdom, help to increase production. It also appears that the method of charging for domestic electricity in many countries militates against economy : " two-part " tariffs are employed which involve a lower price for marginal consumption and thus encourage demands on limited capacity. Hence, there are chronic breakdowns in power supplies at peak periods which affect industry and the private consumer alike. In the present situation, the " two-part " principle might well be reversed meters could be designed which charge a higher than average price for marginal consumption and, even more important, a higher price at peak periods. It is at present difficult to follow any policy of rational utilization of energy resources ; different countries and consumers are, at the moment, dependent on decisions which are sometimes arbitrary and likely suddenly to be reversed ; they are unable to take much account of relative costs. It is thus not surprising to find that, since the pre-war years, European importers of coal have switched over to other sources of energy to a relatively greater extent than European producers.[3] The price of steel scrap is still held down by deliberate action of steel producers, thus discouraging collection and encouraging an artificially high demand. If scrap prices were

[1] For a fuller discussion of coal and steel, see " The Coal and Steel Industries of Western Europe ", *Economic Bulletin for Europe*, Vol. 2, No. 2.

[2] Some tendency for industrial production to increase faster than the output of raw materials is of course normal, as has already been mentioned in Chapter 1.

[3] See *Economic Bulletin for Europe*, Vol. 1, No 3, Table 4, p. 18

higher, more might be done to bring about the necessary increases in the production of iron ore.

Policies of discrimination in favour of domestic consumers by European producers of basic materials are widely practised. Such policies may accentuate the over-all shortages by allowing internal consumption to reach a higher level than would be the case if consumers were forced to economize through competing in a free market with other Europeans. In addition, these policies tend to result in loss of the gains from international division of labour and may redound to the disadvantage of producing countries if they retain for internal consumption basic materials which would yield a greater return if exchanged for materials from other countries.

Prospects for increasing Production of Imported Materials

Self-evidently, Europe is dependent on the expansion of production overseas for increased supplies of materials which she cannot produce at home. In the case of these materials, the paradox about prices already referred to presents itself in an acute form. It has already been seen in Chapter I that Europe is in danger of an acute cost-inflation caused by the rise in prices of primary commodities imported from the outside world. Yet these high prices are themselves an inducement to the increased production which the world and Europe require. It is therefore important to examine the extent to which present plans and prospects for increased production provide compensations for the damage being done by the present high prices.

The prospects of an adequate increase in production in the longer run look hopeful for aluminium, tin, cotton and rubber, but the outlook for other materials may depend on a more direct interest being taken by European countries in their development. Plans to develop production of non-ferrous metals in the United States seem small in relation to the rate of expansion achieved, for example, in the years 1927-1929 : there are no signs that the supply situation for these commodities will improve immediately after 1951 ; western Europe will probably have to rely on an increase in production in new territories. Similarly, the eastern European countries and the Soviet Union are basing their expansion less on resources already developed than on the potentialities of the territories in the eastern regions of the Soviet Union.

The production of wool raises difficult problems. Wool prices, like cotton prices, fell relatively to food prices during the war, thus adversely affecting production, particularly in the United States. Australian production was affected by drought from 1944 to 1946 and South-African production also more recently. In both countries, producers seem to have reached the margin set by climate, given present capital equipment and technology. It is possible, however, that higher production might be brought out by long-term arrangements guaranteeing markets, as farmers believe the present prices to be temporary.

For the time being, however, there is very little evidence of concerted international action for overcoming shortages. In general, there is a tendency for each country to want allocation schemes for the commodities which it has difficulty in obtaining and to be against allocation schemes for commodities which it controls. Moreover, the control of basic materials is distributed in a rather random manner between countries, with no single country exercising over-all dominance. Even countries with no resources of scarce materials may be essential converters of such materials into finished goods , for example, Swiss machine-tool production is essential to United States industry Similarly, western Germany may be in a good bargaining position because it has excess manufacturing capacity, and is thus able to supply goods which, under existing conditions, raw-material-producing countries prefer to gold or dollar balances. In this situation there is great danger that a system of largely bilateral and *ad hoc* arrangements will emerge which will contribute little towards a long-term solution of the basic problems.

Chapter 4

INTERNATIONAL TRADE AND PAYMENTS

Of the various influences affecting Europe's trade and payments relationships during the past year, three developments reviewed in the preceding chapters were of primary importance. One of these was, of course, the continued rise in European production, including the marked recovery in western Germany, and therewith the further increase in the export capacity of European countries. A second and much less foreseeable development was the progression in the United States from economic recovery at the end of 1949 to an inflationary boom at the end of 1950, entailing an extraordinarily large rise in United States imports from European countries, as well as from other sources. A third factor, resulting from currency devaluation towards the end of 1949 and the acceleration in world economic activity in 1950, was the pronounced shift in international price relationships, particularly in the level of primary prices compared with those of manufactured goods. Owing to the importance of these price movements and their widely varying effects on different countries, it will be useful to examine international price developments in more detail before proceeding to an analysis of the changes in Europe's trade and payments.

1. Export and Import Prices since Devaluation

Food and Raw Material Prices

It could be foreseen that devaluation would have the effect of decreasing the prices of European exports in relation to the prices of imports. Some deterioration in the terms of trade could indeed be regarded as the inevitable concomitant of devaluation or any other measures that might be taken to adjust European export prices to a more competitive basis in the "buyer's market" prevailing at that time. It was hoped, however, that this deterioration would be attenuated by two factors which would tend to reduce import costs to European countries. One was the general weakening tendency in world markets for primary commodities which had set in during the months prior to devaluation. The other was the large size of the devaluing area, including, as it did, not only most western European countries, but also most of their affiliated areas and other overseas countries supplying the greater part of Europe's imports of food and raw materials. With the exception of commodities whose prices are largely determined in the dollar market, it could have been expected that the export prices of the devaluing countries would not necessarily rise unduly in their own currencies and would thus be substantially lower in terms of dollars. Moreover, this influence should have tended to spread to the dollar area and bring some further downward pressure on the prices of export commodities from that source.

In the event, from the date of devaluation until the outbreak of war in Korea, the prices of exports from most devaluing countries remained, in fact, remarkably sticky in national currencies and were thus very much lower in dollar terms than before devaluation. This can be seen in the index numbers for June 1950 given in Table 39, which compares the change in primary prices in devaluing and non-devaluing markets respectively. In only a few instances—notably tin, wool, natural rubber and cocoa—had prices in devalued currencies risen, or prices in non-devalued currencies fallen, enough to re-establish approximately the pre-devaluation relationship. In the great majority of cases, prices in devaluing countries remained well below their equivalent dollar levels before devaluation, the decrease being generally within the range of 15 to 30 per cent. In non-devaluing countries, on the other hand, the previous weakening tendency in commodity prices had, in most instances, been halted and given way to new increases by mid-1950, as the renewed upswing in American industrial production, together with the still greater shift in inventory demands, strengthened commodity markets and offset any downward pressure on prices emanating from the devaluation area.

Table

PRICE CHANGES IN BASIC

Index numbers of monthly average price

Group I — Commodities traded on a large scale

Group II — Commodities mainly traded within each

Commodity	Price Changes in Devaluing Countries					Price Changes in Non-devaluing Countries				
	June-August 1949 = 100				*June 1950 = 100*	*June-August 1949 = 100*				*June 1950 = 100*
	1949	1950			1950	1949	1950			1950
	December	June	September	December	December	December	June	September	December	December
Group I										
Aluminium	78	78	78	87	112	100	103	105	112	109
	78	79	79	79	100					
Copper	96	112	124	124	110	108	128	133	142	111
	104	121	134	134	110					
Nickel	89	107	107	109	102	100	120	120	124	103
Tin	74	73	93	141	193	77	75	98	141	186
Fuel oil						106	110	117	118	107
Rubber, plantation	97	174	307	350	202	107	190	344	438	231
Rubber, synthetic						100	100	100	132	132
Cotton, short staple	91	91	108	174	192	95	106	127	133	126
	114	..	129	190	..	96	113	142	200	177
Cotton, long staple	72	68	86	115	167	..	72	88	169	235
Jute	75	75	75	75	100	95	92	..	82	87
Hessian	88	88	88	132	150	119	103	157	202	197
Wool, greasy	92	112	181	217	194	117	152	207	209	138
Wool, scoured	81	103	153	165	161	104	109	153	164	156
Linseed	82	87	95	97	112	103	109	93	104	96
Wheat	93	88	88	88	100	108	105	108	114	108
						99	91	88	88	96
Maize						99	111	115	128	115
Cocoa	71	71	76	96	135	110	139	198	164	118
Coffee	70	70	91	130	188	176	172	202	195	114
Tea	73	73	94	75	103					
Copra	81	105	90	97	92	118	124	142	133	107
Coconut oil	82	79	100	102	128	113	114	129	131	114
Sugar	70	78	78	78	100	106	102	142	129	127
Group II										
Pig-iron	72	72	72	72	100	101	103	104	116	113
	82	66	78	95	142					
Lead	76	78	103	111	142	90	87	117	126	144
	79	79	105	114	144					
Zinc	87	123	141	150	119	101	152	177	182	119
	87	98	120	125	127					
Hard fibres	83	94	109	140	148	73	75	82	133	178
						106	89	100	112	126
Silk	105	104	117	125	119	103	103	130	159	154
Hides	77	81	110	127	156	103	109	150	167	154
Cement	72	72	72	72	100	104	104	104	108	104
Lumber	74	85	88	119	140	97	115	136	119	104
Wood-pulp	100	100	107	135	135	100	100	105	111	111
Sulphuric acid	75	75	75	80	107	104	104	104	117	113
Rye	81	86	93	95	111	105	102	99	117	115
Barley	90	83	89	94	113	116	132	120	123	93
Oats	86	74	82	95	128	116	144	124	149	103
Rice	80	81	87	87	107	95	93	98	113	121
	75	75	75	75	100					
Butter	59	59	59	59	100	105	100	105	110	111
	70	70	70	70	100					
Bacon	70	67	67	67	100	92	92	104	93	102
Meat	75	75	75	79	106	103	112	113	122	109

Sources see Appendix B

a Index number indicated is based on controlled or administered prices The indices given for non-ferrous metals in the United Kingdom relate to Ministry of Supply selling prices which, since devaluation, have closely followed the New York spot quotation The tin market in London was, however, decontrolled in October 1949.

COMMODITIES SINCE DEVALUATION

quotations expressed in dollars
between devaluing and non-devaluing countries
of the two areas or produced and consumed domestically

Origin and Specification of Quotation		Commodity
In devaluing countries	In non-devaluing countries	
		Group I
Western Germany, basic price to producer France, domestic	New York, virgin	Aluminium
London, Ministry of Supply selling price [a] Western Germany, basic price from stocks	New York, electrolytic	Copper
London, Ministry of Supply selling price [a]	New York, cathodes	Nickel
London, auction price [a]	New York	Tin
	United States, Gulf Coast cargoes	Fuel oil
London, ribbed smoked sheets	New York, R S S.	Rubber, plantation
	New York, general purpose type	Rubber, synthetic
India, Jarila, including export duty	United States, middling 15/16	Cotton, short staple
Egypt, Ashmouni	Brazil, Sao Paulo type	
Egypt, Karnak	Peru, Pima type, including export duty	Cotton, long staple
India, first grade, including export duty	Pakistan, middle white	Jute
India, 10½/40, including export duty	New York, 10/40	Hessian
Australia, 56's	Uruguay, 56's	Wool, greasy
London, Dominion 70's	Boston, Territory 64-80's	Wool, scoured
London, Bombay bold	Minneapolis, first quality	Linseed
Australia, free export price	Kansas City, domestic Canada, free export price	Wheat
	Chicago, No 3 yellow	Maize
London, British West African [a]	New York, Brazilian	Cocoa
London, British East African [a]	New York, Brazilian	Coffee
Calcutta, auction price, export leaf		Tea
Indonesia, export price	Philippines, export price	Copra
Malaya, export price	Philippines, export price	Coconut oil
British Dominions, contract price with U K [a]	Cuba, free export price	Sugar
		Group II
United Kingdom, foundry Belgium, foundry	United States, composite price	Pig-iron
London, domestic, soft [a] Western Germany, basic price to producer	New York, desilverized pig	Lead
London, foreign, duty paid [a] Western Germany, basic price to producer	St. Louis, prime western	Zinc
London, East African sisal	Mexico, henequen New York, Manila abaca	Hard fibres
Italy, raw yellow, export price	New York, Japanese, raw double	Silk
London, Cap dry, 18/20 lb.	New York, packers, light, wet-salted	Hides
London, Portland	New York, Portland	Cement
Sweden, fir, standard dimension, export price	United States, Douglas fir, dimension 1	Lumber
Sweden, bleached sulphite, export to Europe	United States, domestic and Canadian sulphite	Wood-pulp
London, ex works	New York, ex works	Sulphuric acid
Western Germany, domestic	Minneapolis, No 2	Rye
Denmark, grain exchange quotation	Minneapolis, No 2 malting	Barley
Denmark, grain exchange quotation	Chicago, No 3 white	Oats
Italy, Milan, hulled common	New Orleans, Blue Rose Head, clean	Rice
New Zealand, contract price with U.K. [a] Denmark, contract price with U.K. [a] Denmark, contract price with Western Germany [a]	Chicago, creamery	Butter
Denmark, contract price with U K. [a]	New York, slab smoked dry	Bacon
New Zealand, contract price with U.K. [a]	New York, steer carcasses	Meat

Similarly, the London cocoa market was re-opened in November 1950. prior to that date, figures relate to Ministry of Food selling prices The London quotation for Kenya coffee is the Ministry of Food selling price during the whole period The indices shown for butter, bacon and meat in the United Kingdom and the western zones of Germany are based on official contract prices negotiated yearly

Several factors combined to account for these divergences in price movements, measured in dollars, during the initial period after devaluation. Some of the prices listed in the table are for goods which are mainly produced and consumed domestically and are thus little influenced by price developments elsewhere: this is true, in the main, of pig-iron, sulphuric acid and cement, while the prices shown as paid to farmers in European countries are also generally sheltered from outside influences. The dollar equivalent of these prices therefore generally fell by the full extent of devaluation. In other instances, special factors produced delays in price adjustments and moderated their scope. Thus, the influence of British bulk purchase contracts may be seen in the delayed and incomplete adjustment in the prices shown for some of the United Kingdom's principal food imports from other countries.[1] Sterling prices for butter, bacon and meat from Denmark and New Zealand were not affected by devaluation : it was stipulated in the long-term contracts that prices should not be adjusted by more than 7½ per cent in either direction, and this has so far prevented larger increases. For a number of major commodities moving in international trade, on the other hand, the relatively sharp fall in the dollar equivalent of prices in devaluing countries compared with prices in the dollar area reflects the disappearance of premiums on supplies from soft-currency sources which had developed during the earlier period of severe dollar shortage. Because of the special nature of the contracts covering such transactions and of differences in qualities or delivery terms, it is not easy to measure these price disparities, but they are known to have been of particular importance in fats and oils and in non-ferrous metals.[2]

In contrast to the more diverse tendencies up to June 1950, commodity prices in general, and especially the prices of raw materials, rose strongly in the second half of the year in both devaluing and non-devaluing countries. Substantial disparities nevertheless remained, owing to a lag in price increases in devaluing countries, particularly in the prices of goods largely produced and consumed domestically or traded mainly within the devaluation area. In the important instance of cotton, on the other hand, export prices in devaluing countries increased much more than in the United States, and substantial premiums developed on non-dollar supplies.[3] This resulted from the export restrictions imposed by the United States because of threatened domestic shortages, as noted in the preceding chapter. Other cotton-producing countries, notably Turkey, India and Peru, faced with stronger foreign demand and sharply rising prices, imposed export duties to help combat inflationary tendencies at home. The Government of India was also motivated in discouraging exports by the existence in India of a shortage of cotton so serious that it had been compelled to seek supplies from the United States. In cotton, therefore, new interferences with the functioning of an international market had developed, attributable not to restrictions on the side of importers, as in the earlier period of serious dollar shortage, but to restrictions by exporters. The same type of situation has also developed in other raw materials subject to direct or indirect control, notably most of the non-ferrous metals, where high premiums over the " official price " are being asked for marginal supplies.

Export Prices of Manufactures

For manufactures, which account for the bulk of European exports to overseas countries, prices in national currencies have moved even more slowly and far more moderately since devaluation than those of primary goods. This conclusion appears to be borne out by the data in Table 40 showing, in the limited detail available, the development of export unit values of manufactures for a number of western European countries and for the United States and Canada, compared with the average levels in the nine months preceding devaluation. Despite the very sharp devaluation of some of the western European currencies and the boom in raw material prices after the outbreak of the war in Korea, it was only in the case of British and French textiles that average export unit values in national currencies increased by more than 10 per cent even as late as the fourth quarter of 1950.

[1] Kenya coffee rose more in price than Brazilian coffee during the period from June to December 1950, but this is also a reflection of the time lag under the British bulk purchase agreement after the earlier great rise in Brazilian coffee prices

[2] Tin is an exception , its price has moved freely and in close parallel in the devaluing and non-devaluing areas throughout the period covered by Table 39.

[3] The price of African sisal also rose substantially in relation to that of Manila hemp and, by the end of 1950, was very much higher compared with pre-devaluation levels This seems to reflect the reduction, in a period of scarcity, of the premium which Manila hemp ordinarily commands over the lower-grade African fibre.

Table 40

CHANGES IN EXPORT UNIT VALUES FOR MANUFACTURES

Index numbers — January-September 1949 = 100

Country	Base year and type of index	Commodity group	In national currency		In United States dollars	
			Second quarter 1950	Fourth quarter 1950	Second quarter 1950	Fourth quarter 1950
United Kingdom	1950 P_3	Textiles	105	115	73	80
		Metal goods	104	107	72	74
		All manufactures	103	109	72	75
Netherlands	1948 P_1	Textiles	104	[a]	73	[a]
		Metal goods	96	[a]	67	[a]
		All manufactures [b]	99	[a]	69	[a]
Sweden	1948 P_3	Machinery	101	99	70	69
		All manufactures [b]	96	100	67	69
Germany : western zones	1936 P_1	Manufactures, half-finished [c]	81	83	72	74
		Finished manufactures [c]	104	105	86	88
		All manufactures [b]	96	97	81	83
France	1949 P_1	Textiles	107	116	82	89
		Metal goods [d]	99	93	76	71
		All manufactures	107	108	83	83
Italy	1948 P_4	Textiles	82	92	73	82
		Machinery and vehicles	101	90	90	80
		All manufactures	89	94	80	83
Belgium-Luxembourg	1948 P_1	Semi-manufactures	82	94	72	82
		Finished manufactures	86	90	75	79
		All manufactures [b]	85	91	74	80
Switzerland	1938 P_1	Textiles	88	90	87	90
	P_1	Machinery	102	101	102	101
	P_2	All manufactures	97	97	96	96
Canada	1948 P_2	Textiles	104	124	94	119
		Metal goods [b]	100	115	91	109
		All manufactures [b]	102	112	93	107
United States	1936-1938 P_4	Semi-manufactures	94	104	94	104
		Finished manufactures	94	100	94	100
		All manufactures [b]	94	101	94	101

Sources and methods see Appendix B

NOTE — It should be noted that indices weighted by moving weights, reflect changes of composition as well as in prices

P_1 Unit value index with moving current weights

P_2 Unit value index with fixed weights

P_3 Unit value index with moving anterior weights

P_4 Unit value index with moving crossed weights

For further clarification, see *1950 Supplement to the Monthly Bulletin of Statistics*, United Nations, page 71

a The Netherlands ceased publishing these data in August 1950

b Weighted between commodity groups according to January-September 1949 exports

c The indices shown for Germany both relate to manufactures, which, in the German statistics, are divided into *Vorerzeugnisse* (half finished) and *Enderzeugnisse* (finished)

d This unit value index, derived from the corresponding volume index, probably understates the rise in export prices because of a systematic shift in exports of metal goods to less highly processed products

This relative immobility of prices of manufactures in national currencies has meant that the fall in the index of unit values of exports in terms of dollars has varied considerably from country to country according to the degree of devaluation, although there was no devaluing country where export prices in dollars in the last quarter of 1950 were not still substantially lower than before September 1949. Export unit values for manufactures expressed in dollars for the countries which had devalued most—the United Kingdom, the Netherlands and Sweden—were down by some 25 to 30 per cent, while French, western German, Italian and Belgian unit values were generally of the order of 15 to 20 per cent less than before devaluation. The principal non-devaluing country in western Europe, Switzerland, registered a substantial decline in the unit value of its textile exports,[1] but the decrease in its export prices for manufactures as a whole was very small, despite the stronger price competition from neighbouring countries. In the United States and Canada, the unit value of manufactures averaged as high as or higher than the pre-devaluation level.

Changes in unit values of recorded exports of course lag behind changes in the prices currently being quoted by manufacturers to buyers, but it seems unlikely that the index numbers for the fourth quarter of 1950 still reflected to any great extent prices resulting from contracts made in national currencies before devaluation. On the other hand, the great rise in raw material costs and the upward tendency of contract prices after Korea are only partly reflected in the fourth-quarter figures and, therefore, even on the basis of price levels of manufactures prevailing at the end of 1950, some further increase in European export unit values may be expected beyond that shown in the table. Still greater increases will follow if the inflationary forces now active in European countries make further headway.

Comparative Changes in Export and Import Prices

The development of prices since devaluation has been found to be extremely diverse. As seen above, price movements have varied widely for different commodities and for the same commodity in different markets. The changes in the levels of import and export prices of European countries since devaluation have therefore varied according to the commodity composition of their trade and according to its distribution between devaluing and non-devaluing areas.

The movement of export and import prices of European countries is shown in Chart 5, giving unit values both in national currencies and in dollars. The chart shows that export prices, expressed in national currencies, rose only gradually and moderately up to mid-1950 in countries which had devalued most—the United Kingdom, the Netherlands and the Scandinavian countries—and tended to fall in other countries where there had been little or no devaluation.[2] It also shows that, although import prices in national currencies naturally rose more rapidly after devaluation for those countries which had devalued most, they remained lower in terms of dollars than for other countries. This is partly a reflection of the fall in price levels in terms of dollars in the devaluing area relatively to those in the non-devaluing area which occurred after devaluation , for it happens that the United Kingdom and the Scandinavian countries and France obtain a much larger share of their imports from devaluing countries than do Switzerland, Belgium and Italy. This tendency for import prices to be relatively low in terms of dollars in countries with the greatest degree of devaluation moderated to some extent the deterioration in their terms of trade compared with those of other countries.

The relative movement of import prices may be further examined in the light of the data in Table 41. The first column shows the change in exchange rates on the dollar and thus indicates how much import prices would have risen in national currencies if each country had traded only with the dollar area, and if the prices of exports from the dollar area had remained unchanged. The second column shows, more realistically, the average change in each country's exchange rates on all foreign currencies, weighted according to the distribution of its imports, and shows how much the level of import prices would have risen if prices had remained unchanged in terms of the exporting countries' currencies. It will be seen that, as late as the second or even the third quarter of 1950, the actual level of import prices in national currencies was, in most instances, not very far from their hypothetical

[1] This was also true of Italy In general, textile prices were more flexible than prices for other manufactures An examination of the behaviour of textile imports into Switzerland in relation to their unit values indicates that textile prices have been, in some instances, sufficiently flexible to offset the effects of devaluation.

[2] The decline in export unit values for Belgium is largely attributable to the break in its steel export prices from the relatively high levels previously charged.

Chart 5

INDEX NUMBERS OF IMPORT AND EXPORT UNIT VALUES

January-September 1949 = 100

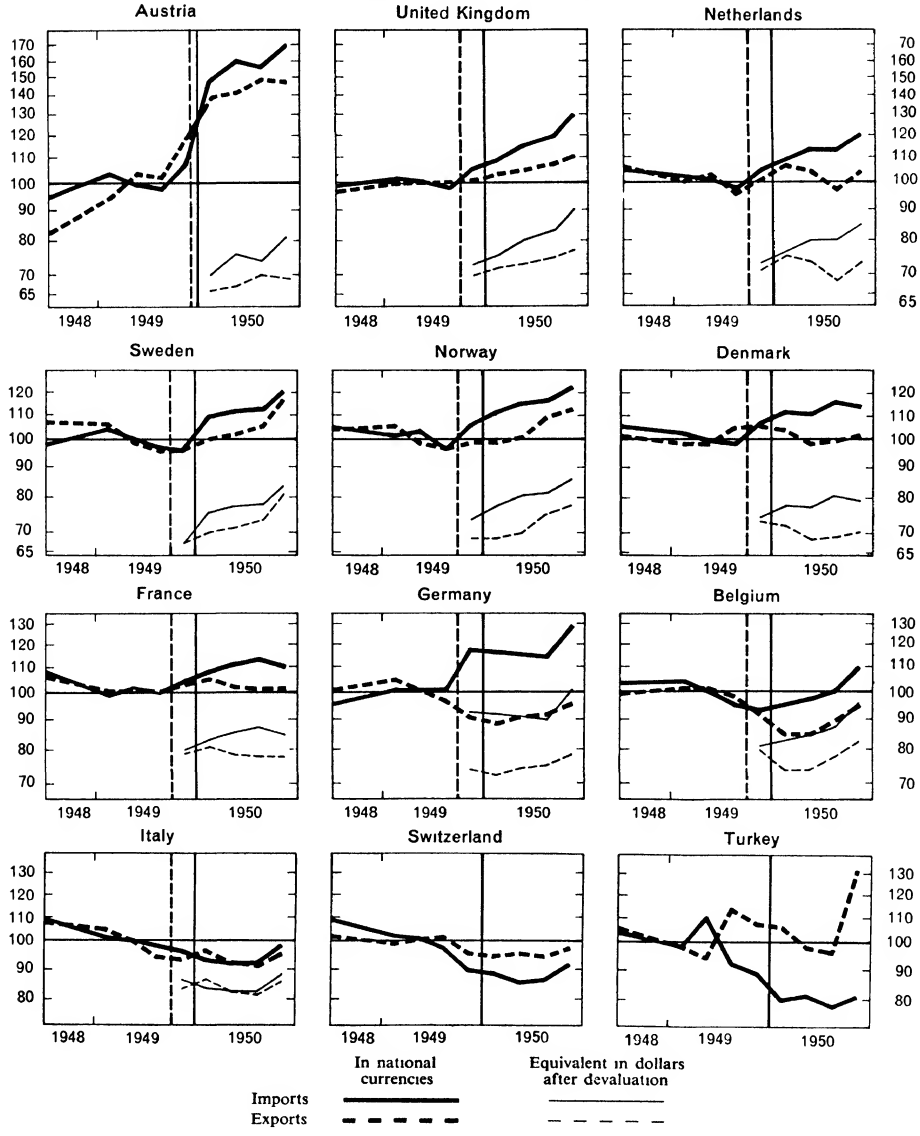

Table 41

CHANGES IN IMPORT UNIT VALUES, EXPRESSED IN NATIONAL CURRENCIES, SINCE DEVALUATION

Country	Index of change in foreign exchange rates *(pre-devaluation rates = 100)*		Type of index	Index numbers of import unit values *(January-September 1949 = 100)*				
	On the U.S. dollar	Weighted average for all foreign currencies [a]		1949 Fourth quarter	1950			
					First quarter	Second quarter	Third quarter	Fourth quarter
Austria	214	185	P_1	107	148	160	157	170
Netherlands	144	118	P_1	104	109	113	113	120
Sweden	144	118	P_3	96	109	111	112	120
United Kingdom	144	116	P_3	105	109	115	119	130
Norway	144	115	P_1	105	110	114	115	117
Denmark	144	113	P_1	106	111	110	115	113
France	128	107	P_1	104	108	111	113	110
Germany : western zones	126	105	P_1	115	113	116	114	124
Belgium	114	95	P_1	93	95	97	100	110
Italy	109	96	P_4	96	93	92	92	98
Switzerland	100	84	P_2	89	88	85	86	91

Sources and methods see Appendix B.
NOTE. — For explanation of type of index, see Table 40

[a] Weighted according to country distribution of imports in the period January-September 1950

level as so calculated. These results indicate once more the relatively limited extent to which export prices in the devaluing countries had changed and the importance of the size of the area to which devaluation extended as a factor in attenuating its effects on any one country.

After the start of the Korean war, however, this pattern was broken and import prices began to rise for virtually all countries, although in varying degree.[1] From the second to the fourth quarter of the year, the increase was greatest in the United Kingdom and Belgium and smallest in Norway and Denmark. These variations reflect differences in commodity composition of imports into these countries. Thus, raw materials – such as wool and rubber, whose prices have increased most – weigh heavily in the imports of the United Kingdom, whereas manufactures, which have risen far less in price, make up a considerably greater share of the imports of Scandinavian countries.

[1] The decline in the unit values of imports into France and Denmark from the third to the fourth quarter of 1950 is difficult to explain and is not consistent with other information available on the changes in their import prices. The results may be due to substantial shifts in commodity composition, illustrating again the deficiencies in unit value indices as measures of price changes.

The commodity composition of exports of European countries is also reflected in the different degrees of increase in the unit values of their exports after June 1950. The increases were greatest for those countries whose exports consist to a large extent of raw materials : forest products in the case of Sweden, Norway and Finland, or cotton in the case of Turkey. The unit value of Belgian exports also increased considerably because Belgian steel prices now rose again. For countries exporting manufactures or foodstuffs, on the other hand, the rise in unit values was still of very modest dimensions by the last quarter of the year.

At the end of 1950, therefore, the terms of trade of the Scandinavian raw material exporters had not changed greatly from the pre-devaluation period, the rise in their export prices tending to compensate the higher cost of their imports. As may be seen in Table 42, their terms of trade were not greatly different from those of Italy, which had devalued only slightly and benefited on the side of imports from lower prices in the devaluing countries, while Switzerland, with no devaluation, continued to enjoy a small but diminishing improvement in its terms of trade.

Table 42

TERMS OF TRADE OF SELECTED EUROPEAN COUNTRIES [a]

Index numbers — January-September 1949 = 100

Country	Type of index	1948	1949				1950			
			First quarter	Second quarter	Third quarter	Fourth quarter	First quarter	Second quarter	Third quarter	Fourth quarter
Austria	P_1	114	108	97	96	91	107	113	106	116
United Kingdom	P_1	102	102	102	96	102	106	107	106	115
Netherlands	P_1	99	101	98	101	103	103	108	116	116
Sweden	P_3	92	98	101	101	100	108	109	107	103
Denmark	P_1	104	104	101	95	101	108	112	116	112
Norway	P_1	102	96	105	100	108	113	114	107	105
France	P_1	102	99	101	100	102	103	108	112	108
Germany western zones	P_1	95	100	99	102	123	119	121	118	120
Belgium-Luxembourg	P_1	105	103	99	97	101	111	115	113	116
Italy	P_4	101	97	100	104	103	97	99	102	103
Switzerland	P_2	106	103	101	96	93	94	90	92	94
Turkey	P_1	99	100	117	82	83	76	84	81	62

Sources and methods see Appendix B

NOTE — P_1 = Index with moving current weights
P_2 = Index with fixed weights
P_3 = Index with moving anterior weights
P_4 = Index with moving crossed weights

For further explanation, see *1950 Supplement to the Monthly Bulletin of Statistics*, United Nations, page 71

a The ratio of the import price index to the export price index

In contrast to all other countries listed in the table, Turkey's terms of trade improved greatly, as the combined effect of not having devalued and of the weight of raw materials in its exports. It may be supposed that this also applied to certain other countries for which figures are not available, such as most eastern European countries. On the other hand, countries exporting chiefly manufactures or foodstuffs, and which had devalued substantially, faced a deterioration of around 15 per cent in their terms of trade by the end of the year. This was the situation in the United Kingdom, the Netherlands, Denmark and Austria. Despite the upturn in its export prices, the deterioration in Belgium's terms of trade was no less serious because of the relatively high and rising level of its import prices. The most adverse shift in the terms of trade is shown, however, for western Germany. This is mainly explained by the fact that western Germany buys a greater share of its imports in non-devaluing countries than other countries which had a devaluation of the same magnitude.

For European countries taken as a whole, the deterioration in the terms of trade with overseas areas between the pre-devaluation period and the fourth quarter of 1950 was nearly 30 per cent.[1] This is substantially greater than that experienced by any one country in its total foreign trade, a result hardly surprising, since, in the total calculation, intra-European trade is excluded. The deterioration in the overseas terms of trade came in two phases. The first was during the period up to mid-1950 and amounted to some 15 per cent compared with the nine-month period preceding devaluation. Most of this shift had been registered by the first quarter of 1950, and there was little further change in the second quarter. Then, however, came the great rise in the price of raw material imports from overseas countries and a renewed deterioration in the terms of trade amounting to an additional 15 per cent by the last quarter of the year. These changes indicate the amount of increase in overseas exports required to obtain a given volume of imports as a result of price changes already reflected in the unit values of trade in the last quarter. As has been noted, however, the unit values do not reflect the full extent of change in current price quotations even up to that time, still less the further price increases which have occurred subsequently.

[1] See Table 4.

2. The General Pattern of Trade

Changes in Volume and Value

Exports of European countries, which in the period immediately following the war were even lower in relation to pre-war than production, have risen very much faster than production during the last few years. The increase from 1948 to 1950 was some 50 per cent, or—expressed in constant prices at the 1949 pre-devaluation level—from approximately $20 billion to $30 billion. As may be seen in Table 43, the greater part of this increase was in intra-European trade, although exports to overseas areas also increased substantially. Over the same period, the total imports of European countries rose by about 20 per cent, all of which was accounted for by the expansion of intra-European trade . imports from non-European sources declined moderately, a sharp fall in imports from North America not being fully compensated by an increase in imports from other overseas countries.

The greater part of these changes, in all instances, was registered in 1950. This was particularly true of Europe's trade with the United States and Canada. Exports to these countries rose by 75 per cent, in contrast to the small decrease experienced in the preceding year, while imports from them were one-third smaller.

Table 43

TRADE OF EUROPEAN COUNTRIES IN CONSTANT AND IN CURRENT PRICES

Millions of dollars, imports c.i.f., exports f.o.b.

Area of destination or origin and year		United Kingdom		Germany : Western Zones		Rest of Europe		Total Europe	
		Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports
I. *In constant prices* (average level Jan.-Sept. 1949)									
United States and Canada	1948	600	1,600	— [a]	700	800	3,200	1,400	5,500
	1949	500	1,700	100	800	700	3,000	1,300	5,500
	1950	900	1,100	100	400	1,300	2,200	2,300	3,700
Other overseas countries	1948	3,900	4,600	— [a]	400	3,500	5,300	7,400	10,300
	1949	4,500	4,800	100	600	4,000	4,700	8,600	10,100
	1950	4,800	5,100	500	900	4,800	5,500	10,100	11,500
European countries	1948	2,000	2,100	600	500	9,000	9,400	11,600	12,000
	1949	2,100	2,600	1,000	900	11,100	11,200	14,200	14,700
	1950	2,600	2,900	2,000	1,600	13,200	14,000	17,800	18,500
Total	1948	6,500	8,300	600	1,600	13,300	17,900	20,400	27,800
	1949	7,100	9,100	1,200	2,300	15,800	18,900	24,100	30,300
	1950	8,300	9,100	2,600	2,900	19,300	21,700	30,200	33,700
II. *In current prices*									
United States and Canada	1948	557	1,641	30	778	858	3,372	1,445	5,791
	1949	501	1,646	54	836	719	2,990	1,274	5,472
	1950	670	1,095	113	441	1,033	2,347	1,816	3,883
Other overseas countries	1948	3,763	4,619	48	307	3,357	5,298	7,168	10,224
	1949	4,111	4,359	129	519	3,725	4,581	7,965	9,459
	1950	3,472	3,965	368	778	3,711	5,012	7,551	9,755
European countries	1948	1,996	2,014	642	503	8,877	9,730	11,515	12,247
	1949	1,944	2,332	942	883	10,506	10,642	13,392	13,857
	1950	1,892	2,169	1,501	1,485	11,092	11,340	14,485	14,994
Total	1948	6,316	8,274	720	1,588	13,092	18,400	20,128	28,262
	1949	6,556	8,337	1,125	2,238	14,950	18,213	22,631	28,788
	1950	6,034	7,229	1,982	2,704	15,836	18,699	23,852	28,632

Sources and methods see Appendix B

[a] Under $50 million

It is illustrative of the wide shifts in dollar price levels produced by devaluation that these impressive changes in the volume of European trade are reflected only indistinctly in the figures of values at current prices also given in Table 43. On this basis, the dollar level of the total imports of European countries has scarcely varied since 1948, and the increase in the dollar value of their exports was only some 18 per cent. These figures are relevant to the evolution of Europe's payments position and indicate how far the deterioration in its overseas terms of trade discussed in the preceding section offset the great increase in its exports in relation to imports during the past year, but they fail completely to show the real changes which have occurred in the volume of goods traded by European countries amongst themselves and with other areas.

The expansion in European trade, both overseas and within Europe, has been accompanied by a relative decline in the leading position held by the United Kingdom. Apart from the exceptionally severe reduction in British imports from North America, this has not been due to a failure of the United Kingdom's trade to expand, but rather to the still more rapid increase achieved in the exports and imports of other European countries, especially western Germany.[1]

The bulk of the great increase in the foreign trade of western Germany during the past two years has been with other European countries, which in 1950 still took 75 per cent of its exports. Its exports to overseas countries increased much more rapidly than those of other European countries, but remained small in absolute amount, accounting for only about 5 per cent of Europe's total exports to overseas countries in 1950, as compared with a share of some 15 per cent before the war.

Owing to the general expansion of demand, the recovery of western Germany's trade does not appear to have produced heavy competitive pressure on other European exporting countries, but was accompanied by an expansion of their sales in the same markets. Thus, in intra-European trade, where Germany's exports doubled in 1950, the exports of twenty-three other European countries taken together rose by about 20 per cent.

[1] In trade and payments data presented in this chapter and elsewhere in the SURVEY, references to "western Germany" apply to the three western zones of occupation and the western sectors of Berlin.

Quarterly Movements in Trade

While the volume of trade of European countries was much greater throughout 1950 than in the preceding year, the increase in exports was particularly marked in the third and fourth quarters. The higher levels attained in the course of the year over the corresponding periods of 1949 may be seen in the following summary figures of total exports and imports, including intra-European trade [2]

Index Numbers of the Volume of European Trade
(corresponding quarter of 1949 = 100)

	Imports	*Exports*
First quarter	113	118
Second quarter	109	120
Third quarter	109	129
Fourth quarter	114	132
Year	112	125

As the increase in world economic activity gained momentum during the year, virtually all European countries participated in this expansion. The strengthening of demand, together with the increase in the quantities of industrial goods and foodstuffs available from current production, was such as to submerge the effects of devaluation on the competitive position of different European countries. All countries which devalued by 20 per cent or more had, however, high exports throughout 1950, whereas the rise in Swiss and Belgian exports did not start until the repercussions of the Korean war were felt late in the year.

The greatest expansion in the course of the year was in western Germany's exports, which in the last quarter were nearly three times as great in volume as the average level in 1949 and 28 per cent above the 1938 level. A very large expansion was experienced by France. Its capacity to supply exports in response to the sellers' market abroad was relatively great because of the weakness which had developed in home demand, which served to release steel and other goods actively demanded in foreign trade. The volume of French exports in the last quarter was some three-fourths higher than the 1949 quarterly average and more than double the relatively depressed level of 1938.

In contrast to the behaviour of exports, the response on the side of imports to the changed conditions in world trade in the second half of the year varied

[2] These figures are derived from the indices of the total export and import volume of individual European countries given in Appendix Table XXVII, which is also employed as the basis for the references in the text to the position of individual countries.

widely. In the United Kingdom, there appeared to be a notable tendency to withhold purchases in the face of the rise in world prices, and imports in the second half of 1950 remained lower than in the preceding year despite the substantial increase in its industrial production and raw material needs over the period.

In most other countries, the volume of imports rose very sharply in the last months of the year. This was particularly true of western Germany, where the very liberal operation of import controls permitted an immediate response to the change in world markets and to the further increase in domestic activity. As a result, imports into western Germany soared in the last quarter of the year to a level 60 per cent higher than the average for 1949 and more than one-fourth higher than that for 1938.

3. The Development of European Imports

The wide divergence in the behaviour of imports of different European countries in 1950 was accompanied by a considerable shift in sources of supply and in the composition of trade. The main movements in imports of foodstuffs and raw materials [1] are summarized in Table 44, which shows the particularly striking fall in European imports of both foodstuffs and raw materials from North America.[2] These declines tended to be offset by increased imports from other overseas sources, to a greater extent, however, in raw materials than in foodstuffs. At the same time, the imports of European countries from European sources increased very substantially in both groups of commodities.

Table 44

IMPORTS OF FOOD AND INDUSTRIAL MATERIALS BY FOURTEEN WESTERN EUROPEAN COUNTRIES [a]

Billions of dollars in pre-devaluation 1949 prices

Area of origin	Year	Food and feeding-stuffs	Industrial materials
United States and Canada	1949	2.0	1.4
	1950	1.2	0.9
Other overseas countries .	1949	3 9	4.2
	1950	4.4	4.7
Total overseas	1949	5 9	5.6
	1950	5.6	5 6
Europe . .	1949	1.7	2 8
	1950	2.1	3 5
Total	1949	7 6	8 4
	1950	7.7	9.1

Sources and methods see Appendix B

[a] Austria, Belgium-Luxembourg, Denmark, France, the western zones of Germany, Iceland, Ireland, Italy, Netherlands, Portugal, Sweden, Turkey and the United Kingdom

Imports of Foodstuffs

Three main features may be distinguished in the development of European food imports in 1950 : a heavy reduction in total imports of grain, especially bread grain, by European countries ; increased availabilities of foodstuffs, especially the protective foods, from European producing countries ; and evidence of substantial improvements in nutrition levels, particularly in western Germany. These developments may be considered in the light of Table 45, giving the quantities of the principal foods (and also raw materials) imported by the United Kingdom, western Germany and other European countries for which statistics are available.

The reduction in European imports of bread grain by 4 million tons was concentrated mainly in imports from North America by western Germany and the United Kingdom and was one of the major factors in the improvement of Europe's dollar position in 1950. British imports of bread grain from other overseas sources, particularly from Australia, also declined, whereas western Germany obtained somewhat larger tonnages from Argentina under the new trade agreement concluded in July 1950. The decrease in the total amounts taken by these two leading importing countries may be partly explained by a fall

[1] Imports of manufactures are discussed in a later section of this chapter.

[2] Appendix Table XXVIII, giving imports into European countries from the United States of all commodity groups, including manufactures, shows that a sharp curtailment of imports occurred for nearly all items specified, with the exception of copper and manufactures, where a small increase was registered, and of machinery, where imports have been very nearly maintained, although "special category" exports from the United States largely supplied under military aid programmes (which contain certain machinery items) have been excluded as from the second quarter of 1950.

Table 45

GROSS IMPORTS OF FOOD AND INDUSTRIAL MATERIALS BY WESTERN EUROPEAN COUNTRIES FROM ALL SOURCES [a]

Thousands of tons

Commodity group	United Kingdom			Germany, western zones			France			Other western European Countries			Total western European Countries		
	1948	1949	1950	1948 [b]	1949 [b]	1950	1948	1949	1950	1948	1949	1950	1948	1949	1950
Bread grain [c]	5,328	5,609	3,859	3,808	3,311	1,949	1,176	670	228	7,421	6,035	5,443	17,733	15,625	11,479
Coarse grain [c]	2,514	1,316	1,928	915	2,206	1,093	592	971	819	3,228	3,522	3,676	7,249	8,015	7,516
Meat [d]	1,093	1,150	1,270	44	87	210	22	10	10	222	185	145	1,381	1,432	1,635
Butter	274	320	340	1	3	46	5	26	19	57	44	36	337	393	441
Cheese	159	216	156	2	22	44	2	9	23	39	47	46	202	294	269
Eggs [e]	174	206	219	9	12	115	16	7	11	32	28	31	231	253	376
Sugar [f]	2,317	2,589	2,732	551	271	612	329	269	341	1,361	1,135	1,474	4,558	4,264	5,159
Fish	253	243	138	305	289	112	76	80	78	325	290	305	959	902	633
Oilseeds	1,024	1,298	1,205	140	423	381	531	678	430	734	1,021	1,227	2,429	3,420	3,243
Fats and oils	644	702	739	119	255	603	122	126	173	429	577	709	1,314	1,660	2,224
Coffee	51	42	39	10	26	27	71	87	150	289	293	260	421	448	476
Tea	185	211	161	—	2	2	1	2	1	22	22	33	208	237	197
Tobacco [g]	114	122	123	6	41	41	12	31	19	109	117	132	241	311	315
Coal, coke and patent fuel	88	14	14	2,005	3,175	5,382	17,122	18,654	10,529	44,922	42,370	46,224	64,137	64,213	62,149
Crude and refined petroleum [h]	19,003	18,695	20,167	1,654	2,357	2,854	8,632	12,451	14,646	19,144	20,968	28,724	48,433	54,471	66,391
Crude and finished steel [h]	414	894	467	18	74	243	296	183	110	3,889	3,934	4,480	4,617	5,085	5,300
Copper [i]	362	316	323	18	43	86	103	124	110	325	290	330	808	773	849
Lead [i]	163	189	175	1	1	4	36	22	29	80	120	135	280	332	343
Tin [i]	—	1	5	2	4	9	8	4	6	5	6	12	15	15	32
Zinc [i]	170	145	144	11	12	6	39	50	30	48	65	66	268	272	246
Aluminium [i]	141	168	143	16	16	5	27	5	1	57	49	49	241	238	198
Sulphur [j]	354	399	446	12	25	31	130	165	142	229	181	198	725	770	817
Timber (1,000 m³)	8,513	9,078	7,648	96	634	1,743	4,530	3,428	1,058	8,254	8,990	10,878	21,393	22,130	21,327
Wood-pulp [k]	1,179	1,341	1,431	152	279	281	287	396	501	640	707	882	2,258	2,723	3,095
Newsprint	128	184	141	4	44	30	—	—	1	112	136	152	244	364	324
Raw wool	250	324	291	43	71	100	187	181	160	240	277	294	720	853	845
Raw cotton	395	481	498	120	187	253	195	270	293	464	585	639	1,174	1,523	1,683
Hides and skins	127	143	139	22	57	79	66	55	66	136	155	152	351	410	436
Rubber	194	160	230	75	98	103	105	110	114	124	130	146	498	498	593

Sources Statistics of the importing countries For details of conversion factors used, see Appendix B

[a] The countries covered are predominantly western European, but the expression is employed, for convenience of reference, to cover all countries for which statistics are available, as follows Austria, Belgium-Luxembourg, Denmark, Finland, France, the western zones of Germany, Greece, Iceland, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

[b] The 1948 and 1949 figures relate to the U K /U S Zone only

[c] Including flour in grain equivalent

[d] Including live animals in meat equivalent

[e] Shell, frozen and dried eggs in shell egg equivalent

[f] Raw sugar equivalent

[g] Including manufactured tobacco in raw equivalent

[h] Crude equivalent

[i] Unwrought metal only

[j] Crude and refined sulphur

[k] Dry weight equivalent

Table 46

FOOD IMPORTS OF THE UNITED KINGDOM AND THE WESTERN ZONES OF GERMANY [a]

Thousands of tons

Commodity group and importing country \ Exporting country and year	Denmark		Netherlands		France		Other western Europe [b]		Eastern Europe [c]		Total Europe		United States and Canada		Rest of world		Total	
	1949	1950	1949	1950	1949	1950	1949	1950	1949	1950	1949	1950	1949	1950	1949	1950	1949	1950
Bread grain [d]																		
United Kingdom . . .	—	—	—	—	17	50	—	—	—	—	17	50	4,589	3,446	1,003	363	5,609	3,859
Germany . western zones	61	—	23	5	—	133	1	159	510	247	595	544	2,656	1,168	60	237	3,311	1,949
Coarse grain [d]																		
United Kingdom . .		.	33	32	9	8	17	16	345	762	404	818	94	242	818	868	1,316	1,928
Germany : western zones	10	19	—	—	—	28	8	1	99	49	117	97	1,877	640	212	356	2,206	1,093
Meat [e]																		
United Kingdom . .	102	170	20	43	9	26	121	137	31	48	283	424	50	37	948	920	1,281	1,381
Germany western zones	10	91	3	20	2	26	6	18	4	32	25	187	21	2	41	21	87	210
Butter																		
United Kingdom . . .	96	128	16	15	—	—	—	—	—	—	112	143	—	—	208	197	320	340
Germany: western zones	3	9	—	19	—	—	—	17	—	1	3	46	—	—	—	—	3	46
Cheese																		
United Kingdom .	5	7	18	6	5	3	8	6	—	—	36	22	64	34	116	100	216	156
Germany: western zones	14	17	5	22	—	—	2	4	—	—	21	43	—	—	1	1	22	44
Eggs [f]																		
United Kingdom . .	66	73	17	1	—	—	25	24	11	12	119	110	48	69	39	40	206	219
Germany: western zones	6	17	4	57	—	13	2	18	—	7	12	112	—	1	—	2	12	115
Sugar (raw equivalent)																		
United Kingdom			..	.	—	—	—	..	—	—	—	—	—	—	2,589	2,732	2,589	2,732
Germany: western zones	—	27	22	77	—	31	23	56	14	22	59	213	9	7	203	392	271	612

Sources Figures have been taken from statistics of the importing countries For details of conversion factors used, see Appendix B

[a] The 1949 figures relate only to the U.K /U S Zone

[b] Austria, Belgium, Finland, Ireland, Italy, Norway, Sweden and Switzerland

[c] Bulgaria, Czechoslovakia, Hungary, Poland, Rumania, Yugoslavia and the U S S R

[d] Including flour in grain equivalent.

[e] Including live animals in meat equivalent, poultry, game and tinned meat of all kinds. The totals are greater than those in Table 45 because poultry, etc. are included here

[f] Shell, frozen and dried eggs in shell-egg equivalent

in the consumption of bread grain, associated with an improvement in diet as well as with a rise in domestic production in the case of the United Kingdom. The major factor appears, however, to have been changes in stocks. In western Germany, stocks of bread grain declined by about 730,000 tons, three-quarters of the decrease being in Government holdings. In the United Kingdom, on the other hand, there was only a small reduction in stocks in 1950, the decline in imports reflecting rather the exceptionally high level that had been reached in 1949, when stocks were replenished, after having been nearly exhausted following a bad domestic harvest the year before.

Coarse grain imports into western Germany also fell heavily in 1950 compared with the relatively large volume taken in 1949, and there were also substantial declines in the imports of Denmark and Sweden. A movement in the opposite direction occurred in the United Kingdom and also in Ireland and the Netherlands. In all countries, however, coarse grain imports remained well below the pre-war level and, for Europe as a whole, were 4.2 million tons lower than in the period 1934 to 1938, a reduction of 36 per cent,[1] chiefly because of the great expansion in Europe's own production of various other feeding-stuffs, as has been discussed in Chapter 2.

The increased supply of food imports from European sources is evident in Table 46, giving the origin of several of the main food commodities imported by the United Kingdom and western Germany, the two most important European importers of food. For these two countries combined, imports of meat from European sources doubled in 1950, and their imports of butter and eggs also increased. Although these increased imports were drawn from various European countries, the two main sources of supply were Denmark and the Netherlands.[2]

Together with some decline in bread consumption in a number of European countries, the very sharp fall in imports of fish and the increased trade in meat and dairy products are indications of a substantial improvement in diets. These changes were, however, concentrated to a large extent in western Germany, whose imports from Denmark and the Netherlands increased strikingly under the relatively free import policy which it pursued. At the same time, there was a very substantial increase in western Germany's imports of fats and oils, which had been particularly low in the earlier post-war years, and of sugar.

The effect of the changes in the volume and composition of western Germany's food imports, together with its own increased food production, may be seen in Table 47. It will be noted that, in the high-quality foods, apparent consumption *per capita* rose markedly in 1950, and by the last quarter of the year was not only comparable with pre-war standards, but was also at a level equivalent to that in the United Kingdom.

[1] This figure refers to the gross imports of European countries, including intra-European trade.

[2] In the case of meat, Ireland ranks together with Denmark as a chief supplier of the United Kingdom.

Table 47

FOOD CONSUMPTION IN THE WESTERN ZONES OF GERMANY AND IN THE UNITED KINGDOM

Kilogrammes per capita—annual rates

Commodity	Germany	United Kingdom	Germany · western zones			United Kingdom	
	1935 - 1938	1934 - 1938	1948/49[a]	1950	1950 Fourth quarter	1950	1950 Fourth quarter
Cereals	112	93	126	121	109	98	98
Total meat[b]	48	54	18	32	40	42	41
of which pork, bacon, ham	29	12[c]	8	18	25	9[c]	8[c]
Sugar, refined	24	46	21	27	37	35	35
Oils and fats	25	19	10	18	20	20	21

Sources see Appendix B

[a] Excluding West Berlin.

[b] Excluding rabbits, game and poultry

[c] Ham and bacon only.

The increases in German food imports were, to some extent, achieved in competition with the United Kingdom for European supplies through a more flexible price policy. Thus, when the United Kingdom refused to pay increased prices for Dutch butter and eggs following devaluation, the Netherlands diverted an increasing share of its exports to Germany.[1] Whereas the falling-off of Dutch deliveries was compensated by increased British imports of butter and eggs from other sources, the shift in Dutch exports of cheese away from the United Kingdom contributed to a sharp decline in total supplies imported by the United Kingdom, as its purchases from the United States had been reduced after devaluation. British imports of dairy products other than cheese increased moderately, however, and its imports of meat were also substantially higher for the year as a whole than in 1949, although the trend during the year was downward because of the decrease and eventual stoppage of meat deliveries from Argentina following the failure to reach agreement on prices.

Imports of Industrial Materials

Imports of supplies for industrial use, shown in Table 45, developed against the background of the change in the course of 1950 from apparent surpluses to severe shortages on the world markets. Until the last quarter of the year, when serious difficulties in obtaining supplies appeared, the behaviour of imports seemed to reflect the different reactions of various countries in the face of changes in relative prices after devaluation and of rising prices in the latter half of 1950, and therefore does not conform to any common pattern.

The change in the economic climate during 1950 made itself felt particularly in the behaviour of coal imports, derived mainly from European sources since imports from the United States fell to a negligible level. In the early part of the year, the weakness of demand tended to be the limiting factor, especially in France, the leading importer, although its reduced purchases were offset by increased imports into the smaller coal markets - the Scandinavian countries, the Netherlands, and Switzerland - whose coal imports since the war had been relatively low. In the latter part of the year, limitations on the side of supply became relatively more important, as the continued failure of the leading coal producers to expand output in the face of their own rising industrial requirements led them to curtail exports at a time when demand by France and other importing countries became far keener.[2]

Timber imports declined both from European and from North-American sources. This was accompanied by wide shifts in the volume and direction of the trade. Imports into the United Kingdom fell severely and with serious effects on its supply position, because of the British refusal to accede to the higher sterling prices asked by timber exporters after devaluation. The available supplies were taken by other countries : Canadian exports shifted to the United States as construction demand in that country rose, while Swedish exports were directed to western Germany for the same reason. Western Germany's total timber supplies thus increased greatly, imports rising by more than 1 million cubic metres while its exports (a temporary post-war phenomenon) fell by about twice that amount There was at the same time a switch in the position of France, partly because of the disappearance of western Germany's exports which had gone largely to France, and partly because fire-damaged timber from the great Landes forest fire had added exceptionally to its domestic supplies and even resulted in some timber exports in 1950.

Among other major products imported from overseas, raw cotton rose by 11 per cent and about kept pace with the increase in cotton textile production in Europe. Because of the short 1950 crop and the imposition of export restrictions, imports from the United States, the major supplying country, were, however, drastically reduced compared with 1949. In the case of the United Kingdom, imports of United States cotton in the last quarter were even smaller than in the seasonally low third quarter, but the total volume of British imports was maintained through larger purchases from various smaller producers, in some instances at considerably higher prices. Imports of raw wool by European countries, on the other hand, failed to show any increase in face of expanding production of wool yarn ; this was mainly because of

[1] The large increase in German meat and dairy produce imports derived from the Netherlands was also due to the particularly far-reaching liberalization applied to imports from that country since the end of 1949.

[2] It should be noted that Table 45 shows gross, not net, imports Therefore, imports into western Germany appear in the table and have even increased despite its position as an important coal exporter. These imports, which are practically entirely derived from the Saar, reflected partly the development of normal exchanges of different grades and varieties among producing countries and partly geographic proximity.

a decline in imports into the United Kingdom which further reduced its stocks.

Imports of non-ferrous metals, partly from overseas and partly from European sources, showed a more varied behaviour. Copper and tin imports rose and aluminium and zinc fell in the total for European countries, but in most instances new supplies fell behind current consumption requirements. Imports of natural sulphur from the United States showed an increase over 1949 for the year as a whole because of increased purchases by the leading importer, the United Kingdom, but these imports began to decline during the year and fell off sharply in the last quarter following the imposition of export restrictions in the United States.

Among the major trading countries, western Germany stands out because of the general and substantial increase in its imports of various raw materials in 1950. The rapid growth in its industrial production was the chief reason for these increases, although the great upswing which has been noted for the fourth quarter seemed to reflect some inflation of demand for stocking purposes. Switzerland was the only country, however, whose imports clearly reflected the laying in of reserve stocks of raw materials in short supply, including cotton, wool and sulphur.[1]

4. The Development of European Exports

Changes in the Competitive Position

In 1950, European exports displaced those of the United States on a wide scale in world markets. The relative movements may be seen in Table 48, showing exports of the leading European countries and of the United States in the first nine months of 1949 and of 1950. In this table, exports are valued at the average prices prevailing in the first of these periods in order to show the changes which have occurred in the volume of trade. Total exports by the European countries listed, thus expressed at constant prices, rose by more than $4 billion from 1949 to 1950, whereas United States exports declined by $2.4 billion.[2]

The greater part of this shift occurred in Europe itself: exports of European countries to markets within the area rose, while their imports from the United States fell. This was largely accounted for by the heavy decline in European imports of food and raw materials from the United States and the concurrent rise in intra-European trade in these commodities. The decline in European imports of manufactured goods from the United States was of much smaller proportions, particularly in metals and engineering goods.

In their overseas trade, European countries experienced a remarkable expansion in exports to the Western Hemisphere. Whereas in earlier post-war years the increase in their exports had been largely concentrated in the sheltered markets of the sterling area and dependent territories, in 1950 more than half of the total rise in overseas exports was in sales to North and South America. About one-third of the total increase was accounted for by sales to the United States alone, which responded rapidly to the stimulus of the boom conditions which developed in the American economy during the year.[3] In other Western Hemisphere markets, there was a general rise in European exports and a fall in United States exports. Exports of European countries to their affiliated areas overseas (including the sterling area) increased only moderately, while United States exports to these markets declined. Total exports from both these sources to this group of countries were, however, heavily influenced by import restrictions imposed by India and South Africa.

Although these broad changes in the relative position of European and United States exports occurred shortly after the devaluation of most western European currencies, they cannot be regarded as the consequences of devaluation alone. Other important developments affecting trade during the same period have tended to obscure the changes produced by

[1] These increases, which were encouraged by the Swiss Government, also extended to certain foodstuffs, notably sugar, imports of which rose from 160,000 tons in 1949 to 326,000 tons in 1950, while Switzerland's small home production did not show any significant variations.

[2] The figures are given as annual rates and cover exports both to European and to overseas markets.

[3] As may be seen in Appendix Table XXIX, European exports to the United States rose quarter by quarter in 1950, with a particularly sharp increase after the middle of the year. The expansion included heavy gains in items such as metals and chemicals, stimulated by the growing American demand for industrial materials.

Table 48

EXPORTS FROM SELECTED WESTERN EUROPEAN COUNTRIES AND FROM THE UNITED STATES TO EUROPE AND TO OVERSEAS COUNTRIES, BY MAJOR COMMODITY GROUPS [a]

Millions of dollars in pre-devaluation 1949 prices

Annual rates for first 9 months of each year

Exporting country	Area of destination	Food and Raw Materials [b] (1, 2, 10)			Metals and Engineering Products (3, 4, 5, 6)			Textiles (8)			All Other Manufactures (7, 9)			Total (1-10)		
		1949	1950	Index numbers 1950 1949 = 100	1949	1950	Index numbers 1950 1949 = 100	1949	1950	Index numbers 1950 1949 = 100	1949	1950	Index numbers 1950 1949 = 100	1949	1950	Index numbers 1950 1949 = 100
United Kingdom	Europe	433	521	*120*	1,004	1,184	*118*	285	432	*152*	288	357	*124*	2,010	2,494	*124*
	Overseas	521	636	*122*	2,520	2,898	*115*	1,189	1,046	*88*	803	962	*120*	5,033	5,542	*110*
Scandinavian countries [c]	Europe	1,288	1,672	*130*	425	528	*124*	18	35	*194*	246	345	*140*	1,977	2,580	*131*
	Overseas	315	420	*133*	148	223	*151*	6	11	*183*	151	171	*113*	620	825	*133*
Netherlands	Europe	566	849	*150*	179	231	*129*	85	136	*160*	70	102	*144*	900	1,318	*146*
	Overseas	117	127	*109*	107	146	*136*	98	95	*97*	73	104	*142*	395	472	*119*
France	Europe	567	803	*142*	272	354	*130*	169	219	*130*	161	207	*129*	1,169	1,583	*135*
	Overseas	307	400	*130*	605	777	*128*	385	428	*111*	293	360	*123*	1,590	1,965	*124*
Germany western zones	Europe	460	527	*115*	332	783	*236*	55	65	*118*	96	255	*265*	943	1,630	*173*
	Overseas	21	31	*148*	99	291	*294*	32	18	*58*	27	100	*370*	179	440	*246*
Belgium-Luxembourg	Europe	236	272	*115*	608	426	*70*	172	254	*148*	190	201	*106*	1,206	1,153	*96*
	Overseas	41	58	*141*	427	257	*60*	87	57	*66*	114	148	*130*	669	520	*78*
Italy	Europe	241	354	*147*	144	144	*100*	124	246	*198*	48	50	*104*	557	794	*143*
	Overseas	83	128	*154*	175	152	*87*	235	200	*85*	65	55	*85*	558	535	*96*
Switzerland	Europe	52	55	*106*	194	200	*103*	71	90	*127*	148	154	*104*	465	499	*107*
	Overseas	16	14	*88*	80	77	*97*	37	39	*105*	171	190	*111*	304	320	*105*
Total [d]	Europe	3,908	5,113	*131*	3,160	3,858	*122*	984	1,488	*151*	1,264	1,688	*134*	9,316	12,147	*130*
	Overseas	1,446	1,843	*127*	4,166	4,829	*116*	2,084	1,917	*92*	1,706	2,100	*123*	9,402	10,689	*114*
United States [e]	Europe	2,780	1,855	*67*	1,097	922	*84*	90	72	*80*	311	222	*71*	4,278	3,071	*72*
	Overseas	2,596	2,508	*97*	3,869	3,026	*78*	599	410	*68*	1,020	917	*90*	8,084	6,861	*85*

Sources . Statistics of the exporting countries. See Appendix B

NOTE. — Exports of semi-manufactured gold have been excluded.

a The figures for exports to overseas countries are obtained by deducting exports to principal European markets (approximately 97 per cent of total exports to Europe of the exporting countries considered) from total exports Since total exports are often published in a more detailed commodity classification than exports to particular countries, the break-down between Europe and overseas may not be altogether correct.

b Including unspecified items.

c Denmark, Finland, Norway and Sweden.

d Total of countries listed and Portugal

e From July 1950 the trade statistics of the United States do not give the country break-down for "special category commodities" Therefore, figures for exports to European countries are too low since they were obtained by adding the exports to individual countries. Conversely, figures of United States exports to non-European countries, obtained by difference, are too high

devaluation in the competitive positions of European countries, both in relation to the United States and in relation to one another. These developments include the general but unequally distributed rise in export availabilities through increased production, the liberalization of trade among western European countries, the tightening of import restrictions in certain major overseas markets, the emergence of extraordinary import demands in the United States, and the decline in American financial aid to countries both in Europe and overseas.

The effect of these extraneous influences is particularly evident in intra-European trade. About one-third of the total increase in intra-European trade was in food and raw materials and was largely the result of increased production in the exporting countries and of the more liberal import policies adopted by importing countries. Trade in textiles has also clearly been influenced by other forces, exports of most countries increasing substantially to European markets and remaining stable or falling to overseas markets, irrespective of the change in relative currency values. The main explanation, as is shown below, lies in the measures taken towards the liberalization of trade by western European countries.

In metals and engineering products, on the other hand, the data in Table 48 seem to provide clear evidence of the change in competitive positions brought about by devaluation. Exports from all countries which devalued by 20 per cent or more increased, both to European and to overseas markets, whereas exports from Belgium, Italy and Switzerland, as well as from the United States, have fallen or, at best, remained constant. Much the same conclusion emerges from an examination of the group "all other manufactures"; exports by countries which devalued by 20 per cent or more increased substantially in virtually all cases, whereas exports by other countries showed little tendency to expand.

Among the countries which devalued by 20 per cent or more, the United Kingdom experienced by far the smallest export increase. The reason for this is to be found mainly in its exports of textiles, which remained constant in total volume, and in its exports of machinery and of metals and manufactures, which increased by only 6 and 12 per cent respectively, whereas British exports of vehicles rose by 30 per cent. Western Germany, on the other hand, accounted for almost one-half of the increase in total European exports of metals and engineering products, its exports to Europe expanding by nearly two and a-half times and its exports to overseas markets by nearly three times. A large part of the increase in Germany's exports, which was much greater than the increase in exports of other countries whose export prices were reduced to the same extent, must be attributed to factors other than devaluation, notably the general recovery of the German economy. Devaluation in other countries would seem to have had the effect, however, of shifting the brunt of the growing German export competition to the United States and other countries which either did not devalue or did so only to a moderate extent.

The Effects of Devaluation

The data given in Table 48, although clearly indicative of the effects of devaluation on relative competitive positions, are nevertheless influenced or, in some instances, dominated by special conditions in one or another of each country's principal markets —conditions which may be favourable or unfavourable for reasons having nothing to do with devaluation. To eliminate as far as possible the effects of such extraneous factors, a quite different method has been employed in Table 49, in order to analyse the effects of devaluation on trade in manufactures —trade in food and raw materials which is largely governed by other factors being excluded. This method consists in computing the average shift in the share of various exporting countries in a number of export markets in the first nine months of 1950 compared with the same period of 1949.[1] The data, divided into six categories of manufactures, cover twelve western European countries, divided into two groups: those which devalued by 20 per cent or more, among which the United Kingdom and western Germany are shown separately, and those which devalued by less than this or not at all. To make the investigation as broad as possible, exports of textiles from India, which are of considerable importance, have been added to the first group, while exports in all groups from the United States and Japan have been included with the second group, the data

[1] The data are derived from the statistics of the exporting countries expressed, as indicated in the table, in constant pre-devaluation prices. In current prices, the results would be quite different, since, as explained in section 1 of this chapter, export prices of devaluing countries have remained much lower in terms of dollars than before devaluation.

Table

CHANGES SINCE DEVALUATION IN THE RELATIVE SHARES OF
Group I — Exporting countries—
Group II — Exporting countries—

Exporting country ➤ Area of destination	3 METALS AND MANUFACTURES				4. MACHINERY				5. 6 VEHICLES			
	Number of markets in sample	Share in market (simple average)			Number of markets in sample	Share in market (simple average)			Number of markets in sample	Share in market (simple average)		
		1949 (9 months)	1950	Change		1949 (9 months)	1950	Change		1949 (9 months)	1950	Change
All major exporters of manufactures :												
Group I ➤ European affiliated areas [d]	13	64	77	+13	17	67	75	+ 8	18	68	81	+13
Group II ➤ European affiliated areas [d]		36	23	−13		33	25	− 8		33	20	−13
Group I ➤ Other overseas countries	12	29	43	+14	12	25	32	+ 7	12	24	35	+11
Group II ➤ Other overseas countries		71	57	−14		75	68	− 7		76	65	−11
Group I ➤ Western European countries	14	50	66	+16	14	52	61	+ 9	14	60	71	+11
Group II ➤ Western European countries		50	34	−16		48	39	− 9		40	29	−11
Group I ➤ Total	39	48	63	+15	43	50	58	+ 8	44	53	65	+12
Group II ➤ Total		52	37	−15		50	42	− 8		47	35	−12
Countries in Group I [e]												
United Kingdom ➤ European affiliated areas [d]	13	59	66	+ 7	13	62	69	+ 7	13	62	76	+14
United Kingdom ➤ Other overseas countries	11	24	25	+ 1	11	24	26	+ 2	11	24	32	+ 8
United Kingdom ➤ Western European countries	14	18	18	—	14	26	25	− 1	14	37	41	+ 4
United Kingdom ➤ Total	38	33	36	+ 3	38	37	40	+ 3	38	42	51	+ 9
Germany : western zones ➤ European affiliated areas [d]	8	2	9	+ 7	8	—	2	+ 2	3	*f*	*f*	*f*
Germany : western zones ➤ Other overseas countries	12	2	11	+ 9	12	1	5	+ 4	8	—	2	+ 2
Germany : western zones ➤ Western European countries	14	11	23	+12	14	7	16	+ 9	14	3	9	+ 6
Germany : western zones ➤ Total	34	5	15	+10	34	3	9	+ 6	25	2	6	+ 4
Other European exporting countries of this group ➤ European affiliated areas [d]	6	9	12	+ 3	9	*f*	*f*	*f*	8	*f*	*f*	*f*
Other European exporting countries of this group ➤ Other overseas countries	4	*f*	*f*	*f*	4	*f*	*f*	*f*	3	*f*	*f*	*f*
Other European exporting countries of this group ➤ Western European countries	14	21	25	+ 4	14	19	20	+ 1	14	19	20	+ 1
Other European exporting countries of this group ➤ Total	24	17	22	+ 5	27	23	25	+ 2	25	28	31	+ 3
Countries in Group II [e]												
Belgium-Luxembourg, Italy and Switzerland ➤ European affiliated areas [d]	7	13	6	− 7	5	*f*	*f*	*f*	3	*f*	*f*	*f*
Belgium-Luxembourg, Italy and Switzerland ➤ Other overseas countries	10	16	12	− 4	10	10	8	− 2	7	6	6	—
Belgium-Luxembourg, Italy and Switzerland ➤ Western European countries	14	28	21	− 7	14	16	12	− 4	14	12	9	− 3
Belgium-Luxembourg, Italy and Switzerland ➤ Total	31	21	15	− 6	29	12	9	− 3	24	9	7	− 2
United States ➤ European affiliated areas [d]	13	26	16	−10	17	31	23	− 8	18	31	19	−12
United States ➤ Other overseas countries	12	57	46	−11	12	67	61	− 6	12	73	62	−11
United States ➤ Western European countries	14	21	12	− 9	14	32	27	− 5	14	28	20	− 8
United States ➤ Total	39	34	24	−10	43	41	35	− 6	44	42	31	−11

Sources and methods see Appendix B

[a] Computed from trade statistics of exporting countries valued at pre-devaluation 1949 prices

[b] United Kingdom, western Germany, France, the Netherlands, Sweden, Denmark, Norway and (for textiles only) India

[c] Belgium-Luxembourg, Italy, Switzerland, United States and Japan

[d] Overseas members of the sterling area, Canada and the dependent territories of European countries

[e] Since total imports of manufactures into each export market included in the investigation are computed as the sum of exports from those supplying countries only for which sufficiently detailed export statistics are available, the percentage share in the markets and the percentage shift from 1949 to 1950 tends to be overstated for the individual exporting countries which

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EXPORTING COUNTRIES IN SELECTED MARKETS FOR MANUFACTURES [a]

devaluation of 20 per cent or more [b]

no devaluation or less than 20 per cent [c]

7. Chemicals				8 Textiles				9. Other Manufactures				*Area of destination ← Exporting country*
Number of markets in sample	Share in market (simple average) 1949 (9 months)	1950	Change	Number of markets in sample	Share in market (simple average) 1949 (9 months)	1950	Change	Number of markets in sample	Share in market (simple average) 1949 (9 months)	1950	Change	
												All major exporters of manufactures :
12	62	69	+ 7	12	66	70	+ 4	8	66	78	+12	European affiliated areas [d] ← *Group I*
	38	31	− 7		34	30	− 4		34	22	−12	← *Group II*
12	26	36	+10	12	39	50	+11	12	31	44	+13	Other overseas countries ← *Group I*
	74	64	−10		61	50	−11		69	56	−13	← *Group II*
14	49	63	+14	14	53	55	+ 2	14	63	67	+ 4	Western European countries ← *Group I*
	51	37	−14		47	45	− 2		37	33	− 4	← *Group II*
38	46	56	+ 10	38	53	58	+ 5	34	52	61	+ 9	Total . . . . ← *Group I*
	54	44	−10		47	42	− 5		48	39	− 9	← *Group II*
												Countries in Group I [e]
12	56	60	+ 4	12	49	44	− 5	8	54	63	+ 9	European affiliated areas [d]
11	24	27	+ 3	12	24	30	+ 6	11	27	34	+ 7	Other overseas countries
14	15	15	—	14	25	28	+ 3	14	31	30	− 1	Western European countries ← United Kingdom
37	31	34	+ 3	38	33	34	+ 1	33	36	40	+ 4	Total
7	2	7	+ 5	1	*f*	*f*	*f*	6	—	1	+ 1	European affiliated areas [d]
11	1	8	+ 7	4	*f*	*f*	*f*	12	1	4	+ 3	Other overseas countries
14	8	21	+13	14	4	5	+ 1	14	5	11	+ 6	Western European countries ← Germany Western zones
32	5	14	+ 9	19	4	5	+ 1	32	2	6	+ 4	Total
6	9	8	− 1	6	8	8	—	5	*f*	*f*	*f*	European affiliated areas [d]
4	*f*	*f*	*f*	4	*f*	*f*	*f*	3	*f*	*f*	*f*	Other overseas countries
14	26	27	+ 1	14	23	21	− 2	14	26	26	—	Western European countries ← Other European exporting countries of this group
24	19	19	-	24	16	16	—	22	24	27	+ 3	Total
												Countries in Group II [e]
7	8	8	-	5	*f*	*f*	*f*	5	*f*	*f*	*f*	European affiliated areas [d]
9	13	10	− 3	10	19	20	+ 1	10	20	16	− 4	Other overseas countries
14	24	21	− 3	14	33	34	+ 1	14	24	24	—	Western European countries ← Belgium-Luxembourg, Italy and Switzerland
30	17	15	− 2	29	26	27	+ 1	29	20	18	− 2	Total
12	33	26	− 7	11	15	9	− 6	8	29	19	−10	European affiliated areas [d]
12	64	56	− 8	12	45	32	−13	12	52	42	−10	Other overseas countries
14	27	16	−11	14	12	10	− 2	14	14	9	− 5	Western European countries ← United States
38	41	32	− 9	37	24	17	− 7	34	31	23	− 8	Total

are included. As the sample is most complete for the United Kingdom and the United States, the overstatements occur mainly in the percentages shown for these two countries.

Owing to the overstatements, the sums of the percentages shown separately for the United Kingdom, western Germany and other devaluing countries as given in the table are greater than the percentages given for this group of countries taken as a whole.

In these over-all percentages for the groups of countries, the errors arising from incomplete data are of much smaller magnitude and tend to cancel out.

f For this group the coverage of the sample is inadequate for it to be shown separately, but the figure has, however, been included in the total for all markets in the three areas.

for the United States also being shown separately.[1] The export markets included in the analysis comprise forty-four countries, averages being computed both for this number as a whole and for three subdivisions : overseas countries affiliated with Europe, other overseas countries, and western European countries.[2] Each export market, great or small, is given an equal weight on the theory that a given shift in the distribution of purchases of a small country may be just as significant as a like change in a large country in indicating to what extent devaluation may have altered the competitive status of different exporters. The influence of extraneous events in a few main export markets, which may have a strong influence on movements in the total volume of trade, is thus damped down in the simple averages computed in this way.

The results of the calculation given in Table 49 show clearly enough the considerable effect which devaluation has had in changing the competitive status of the two groups of exporting countries : those which devalued by 20 per cent or more typically increased their collective share of the world market by 10 to 15 percentage points at the expense of the other group of countries which devalued little or not at all. In those cases where the shift was of smaller proportions, other special influences seem to have been at work. This was true of the western European markets for textiles and for miscellaneous manufactures, where trade liberalization outweighed the effects of devaluation, as will be seen below.[3] The more moderate shift between devaluing and non-devaluing countries in the case of machinery exports is probably influenced by the long delivery periods typical of this group of manufactures, so that the full effects of devaluation would tend to be delayed.

Since the European countries which devalued accounted, on the average, for a little more than 50 per cent of exports of manufactures from all sources to the markets covered by the investigation, an increase in their share of the market by 10 to 15 percentage points would represent an increase in their relative exports of 20 to 30 per cent.[4] In so far as devaluation itself may have contributed to the general upturn in economic activity and the expansion of world trade, the gain from devaluation was greater still. Since these results have been obtained by a relative decline in export prices from European devaluing countries of some 20 per cent against American prices, it would appear that purchasers in the export markets did show a significant response to the change in price relationships.

For the group of European devaluing countries as a whole, the effect of devaluation thus seems to have been an expansion in the volume of their exports (in relation to the general rise in trade) which was at least as great as the relative decline in their export prices, measured in dollars. Since their import prices, measured in dollars, also declined as a result of devaluation, it must be concluded that devaluation contributed to the improvement in the balance of payments on current account of the devaluing countries, even allowing for the import content of the increased export volume.[5]

The increases scored by European devaluing countries have been reflected chiefly in the sharp reduction in the average share held by the United States in export markets throughout the world. The universality of this reduction with respect to the commodity groups and the trading areas specified suggests that currency devaluation was a very pervasive influence, even though in a number of markets the tightening of import restrictions against dollar goods may have exercised a still more direct effect.

[1] Exports from these countries—which include all the major exporting countries of western Europe, together with the United States, Japan and, in the case of textiles, India—are thus taken to represent the total imports of the six groups of manufactures into the export markets covered in the analysis. This assumption should not be far from the truth, since the exporters of manufactures not included (Canada, Austria and eastern European countries) supply only relatively small amounts to the export markets included in the investigation.

[2] In order to enhance the comparability of the results, the United Kingdom, western Germany and the United States have not been included among the export markets Furthermore, all markets have been excluded where devaluing countries accounted for virtually all imports before devaluation and where their share could not therefore increase very much more, as would be true of some of the dependent overseas territories.

[3] The shift of only 4 percentage points of textile markets in the affiliated overseas countries in favour of countries which devalued by 20 per cent or more may be explained by the keen competition of cheap Japanese textiles on Far Eastern and African markets in particular.

[4] It should be noted that this calculation of 20 to 30 per cent does not represent the rate of increase in the volume of exports from devaluing countries over 1949, but the percentage increase in their share in the market—i.e., the share of devaluing countries in 1949 was 50 and in 1950 was 60 to 64 per cent. Their share in the market (ignoring changes in the total volume of sales to the market) therefore rose by some 20 to 30 per cent.

[5] This refers to European metropolitan areas only. For the European currency area, including affiliated territories, there was a simultaneous improvement in the balance of payments owing to the increase in dollar prices for certain raw materials ; this was not, however, due to devaluation.

The western European exporting countries which devalued less than 20 per cent or not at all—that is, Belgium, Italy and Switzerland—typically held much smaller shares in export markets than the United States, as seen in Table 49, and any shift in their share of the total market would tend to be correspondingly smaller. Nevertheless, they have also lost ground in virtually all the commodity groups and trading areas specified, and the loss was of considerable proportions in relation to the total volume of their exports.[1]

An examination of the results obtained by various European devaluing countries reveals striking differences in the behaviour of exports. Western Germany took the major part of the gain in most export markets for those commodities forming the mainstay of its exports—that is, metals and manufactures, machinery and chemicals. On the other hand, the United Kingdom increased its share of the market for these commodity groups only to a very limited extent, except in the overseas affiliated areas, where German exports are hampered by restrictions or established ties and preferences. The results shown for the United Kingdom in Table 49 make its export performance in 1950 appear far less satisfactory than might be judged from the over-all increase of 16 per cent in the volume of its exports, which, in 1949, was already 50 per cent above the pre-war level. It becomes clear that this expansion was not much more than that which can be attributed to the general rise in international trade, especially trade within western Europe, which alone accounted for about 50 per cent of the total increase in British exports in 1950. Although devaluation apparently served to increase the percentage share of the United Kingdom in world markets, the average gain was small compared with the increases achieved by other smaller exporters —not more than 2 to 4 per cent of the total market, except in vehicles; and, for reasons attributable to the inadequacies of the data, even these figures overstate its relative gains.[2] The returns attributable to devaluation are thus not very great in the case of the United Kingdom considered in relation to the large share which it already held in foreign markets and in relation to the extent of its devaluation compared with that of other important exporters of manufactures.

If a devaluation is to be successful, it requires not only that importers be prepared to switch purchases from one supplier to another in response to changes in price relations, but also that the devaluing countries themselves be in a position to expand their exports so as to meet the increased demand. Owing to great unused capacity and a vigorous expansion of production, western Germany was in a position to utilize fully the opportunities opened up by devaluation. This seems to have been generally true also with respect to other European countries which devalued by 20 per cent or more, although in some of them—the Netherlands and the Scandinavian countries—economic resources had already been fully utilized before devaluation. In the United Kingdom, on the other hand, the pull of the home market seems to have been too strong to permit British exports to respond fully to the increased demand for exports.

This general conclusion gains strength when the behaviour of some of the most important British export products is compared with the development of the domestic market in the United Kingdom. Sales of vehicles, the only commodity group in which the United Kingdom gained a considerable share of the world market, were strictly limited in the home market in favour of exports. On the other hand, home consumption of cotton cloth, one of the major British export items, rose by 13 per cent in the first nine months of 1950 compared with the same period in 1949, with an increase in production of only 6 per cent. Similarly, in certain types of machinery, amongst which textile machinery and machine-tools are of particular importance, home consumption took up the entire growth in production from 1949 to 1950, and exports did not increase.[3] In other words, it would appear that, with the notable exception of vehicles, the rise in home consumption tended to interfere with the development of British exports on a scale commensurate with the devaluation of the pound and with the general and unexpectedly large rise in world trade during the past year. A significantly smaller degree of devaluation might well have permitted, in the conditions of expanding world demand that subsequently developed, a rise in exports

[1] Since these countries send a considerable share of their exports to European markets, which were expanding rapidly owing to trade liberalization, their total exports did not decline nearly as much as their share in the markets.

[2] See footnote [e], Table 49.

[3] See Table 20.

no less than that which was achieved and, correspondingly, a more substantial contribution to the improvement of the balance of payments.[1]

Trade Liberalization in Western Europe

Until recently, the necessities of post-war reconstruction and the nature of trade and payments controls had led most European countries to favour imports of capital goods and other essentials and to limit imports of textiles and manufactured consumers' goods generally. The result was that, in 1949, trade among western European countries in metals and engineering products had already exceeded the 1938 level by about 10 per cent, whereas trade in textiles was one-quarter lower and that in all other manufactures about one-third lower than in 1938. During 1950 this trend shifted to a remarkable degree. While trade amongst western European countries in metals and engineering products rose by a further 22 per cent, or somewhat faster than in 1949, trade in textiles expanded by 55 per cent, against some 18 per cent in the previous year, and that in other manufactures by some 42 per cent, while it had been declining from 1948 to 1949. The expansion of these last two groups is particularly noteworthy, since the great expansion in western German exports of manufactures to European markets was concentrated to the extent of almost three-quarters on metals and engineering goods.

The invigoration of trade in 1950 seems to have been largely due to the easing of import controls on products which hitherto were most severely restricted. It may be noted in Table 50 that the increase in imports of manufactures tended to be concentrated on goods other than metals and engineering products in the Scandinavian countries, the Netherlands and France, all of which had previously limited less essential imports severely.[2] The easing of import restrictions was largely carried out within the framework of a joint programme by the members of the O.E.E.C., set in motion at the end of 1949 with the initial aim of freeing 50 per cent and, by September 1950, 60 per cent of their imports from one another, exclusive of that part of their trade which was conducted directly by Governments. In October 1950, the organization increased this objective by a further 15 per cent of imports, although qualified, as before, with certain reservations and safeguards. More recently, the principle of establishing a common list of products to be freed from import restrictions has been adopted.[3] In addition to the broader approach worked out by the members of the O.E E.C., a considerable easing in trade restrictions seems also to have resulted merely through the more liberal granting of import licences for commodities not formally liberalized, as well as through special regional trade arrangements such as those made between the Netherlands and Belgium under the " Benelux " agreement.

The effects of the liberalization of trade in some important textile products are clearly revealed by the data given in Table 51, showing exports of cotton and wool cloth by the major European supplying countries. Up to September 1950, only four countries —the United Kingdom, the Netherlands, France and Sweden -had liberalized their imports of these goods, although not necessarily from all western European suppliers.[4] The imports of these four countries are therefore shown separately in Table 51, and that part of their imports which had been liberalized is shown in italics. It will be seen that the liberalized sector of the imports of these countries accounted for all the principal increases in trade in cotton and wool cloth among western European

[1] Judged only by the surprisingly rapid and substantial increase in the gold and dollar reserves held by the United Kingdom, devaluation would seem to have yielded very great benefits This improvement was largely due, however, to the change in speculative attitudes after devaluation and to the boom in exports of the overseas sterling area, against which the United Kingdom has incurred heavy sterling liabilities, as is discussed later in this chapter It is doubtful whether the current account position of the United Kingdom itself was improved by devaluation Such gains in its share of the world market as may be attributable to devaluation seem to have been counterbalanced by the deterioration in its terms of trade even before the recent great rise in raw material prices It must be remembered in this connection that, owing to long-term contracts for part of its imports, the effects of devaluation on the United Kingdom's import prices are delayed Many price revisions in contracts concluded in the autumn of 1950 or in the spring of 1951 are in reality due to devaluation, and some of them even have retroactive effects.

[2] The low level of imports into Italy of all manufactures other than metals and engineering products was due to the fact that Italy first lifted restrictions in September 1950 after an upward revision of tariffs had been carried through. Until that time, only 11 per cent of manufactured imports were liberalized in Italy

[3] The commodities affected are chiefly textile raw materials and manufactures, some food products, chemicals, hides, timber and paper items Here, again, countries in special difficulties may be exempted from enforcing the new measures.

[4] France liberalized cotton cloth from all O.E E C. countries, but did not liberalize wool cloth at all. The three others excluded Belgium, western Germany and Switzerland from the liberalization, and the Netherlands furthermore excluded France and Italy

Table 50

TRADE IN MANUFACTURES AMONG WESTERN EUROPEAN COUNTRIES [a]

Millions of dollars in pre-devaluation 1949 prices and index numbers — previous year = 100

Annual rates for first 9 months of each year

Commodity group and year / Importing country and unit		Metals and Engineering Products (3, 4, 5, 6)		Textiles (8)		All Other Manufactures (7, 9)		Total of Manufactures (3 - 9)	
		1949	1950	1949	1950	1949	1950	1949	1950
United Kingdom	Millions of dollars	208	218	152	169	144	206	504	593
	Index numbers	*180*	*105*	*129*	*111*	*103*	*143*	*135*	*118*
Netherlands	Millions of dollars	407	514	126	246	135	232	668	992
	Index numbers	*110*	*126*	*125*	*194*	*100*	*172*	*110*	*148*
Scandinavian countries [b]	Millions of dollars	722	842	234	328	184	260	1,140	1,430
	Index numbers	*120*	*117*	*104*	*140*	*90*	*142*	*111*	*125*
France	Millions of dollars	296	320	26	110	72	114	394	544
	Index numbers	*108*	*108*	*70*	*430*	*75*	*158*	*97*	*138*
Germany	Millions of dollars	117	169	83	193	85	109	285	471
	Index numbers	*140*	*144*	*530*	*233*	*149*	*128*	*185*	*165*
Belgium-Luxembourg	Millions of dollars	244	316	59	95	106	154	409	565
	Index numbers	*112*	*129*	*80*	*163*	*91*	*146*	*100*	*138*
Italy	Millions of dollars	96	187	24	29	55	85	175	301
	Index numbers	*212*	*195*	*154*	*118*	*131*	*157*	*170*	*172*
Switzerland	Millions of dollars	155	189	33	46	54	85	242	320
	Index numbers	*84*	*122*	*71*	*141*	*74*	*156*	*80*	*132*
Other western European countries [c]	Millions of dollars	538	640	178	205	211	239	927	1,084
	Index numbers	*109*	*119*	*127*	*116*	*100*	*112*	*110*	*117*
Total	Millions of dollars	2,783	3,395	915	1,421	1,046	1,484	4,744	6,300
	Index numbers	*116*	*122*	*118*	*155*	*98*	*142*	*112*	*133*

Sources Statistics of the exporting countries See Appendix B

Note — As the fourth quarter figures both in 1948 and in 1949 were higher than the average of the first three quarters, the index for the first nine months at the annual rate, based on the whole year 1948, is somewhat too low throughout the table Imports of semi-manufactured gold have been excluded

a Exporting countries Belgium-Luxembourg, Denmark, France, the western zones of Germany, Italy, Netherlands, Norway, Sweden, Switzerland and the United Kingdom

b Denmark, Norway and Sweden

c Austria, Finland, Greece, Iceland, Ireland, Portugal, Spain and Turkey

countries during the past year.[1] Thus, all the great expansion in Italy's exports is accounted for by increased sales to the United Kingdom and France, while Italian sales to other markets decreased sharply. Similarly, Belgium's gains were scored exclusively in the Dutch and French markets, whereas its exports to other countries, both in western Europe and elsewhere, fell off precipitously.

The trade in cotton and wool cloth among western European countries has thus developed chiefly along the lines opened up by import liberalization in a few major markets, and the export gains have been scored

[1] While liberalization has led to a large increase in imports into the Netherlands, France and Sweden, total imports of cotton cloth into the United Kingdom have been lower after liberalization because imports from western Germany and Japan, which were not liberalized, were reduced from 20,000 to 9,000 tons. As the British dyeing capacity is greater than the capacity for weaving, large amounts of grey cotton had, in 1949, been bought in Germany and Japan and exported after processing ; in 1950 this processing of foreign cloth was reduced.

Table 51

EXPORTS OF COTTON AND WOOL CLOTH BY SELECTED WESTERN EUROPEAN COUNTRIES

Thousands of tons

Figures in italics show liberalized imports

Importing area / Exporting country and commodity	United Kingdom		Netherlands		France		Sweden		Other O.E.E.C. Countries			Rest of World			Total World		
	1949	1950	1949	1950	1949	1950	1949	1950	1949	1950	Index numbers 1950 (1949 = 100)	1949	1950	Index numbers 1950 (1949 = 100)	1949	1950	Index numbers 1950 (1949 = 100)
	(first 9 months)		(first 9 months)		(first 9 months)		(first 9 months)		(first 9 months)			(first 9 months)			(first 9 months)		
Cotton cloth																	
United Kingdom	—	—	0.2	*0.8*	.	.	0.7	*1.6*	5.0	6.0	120	74.4	59.4	80	80.3	67.8	84
Netherlands	0.6	*0.9*	—	—	—	—	0.8	*0.8*	1.0	1.5	150	10.1	8.5	84	12.5	11.7	94
France	1.8	*0.8*	0.1	—	—	—	0.1	*0.2*	0.5	0.5	100	37.7 [a]	37.6 [a]	100	40.2	39.1	97
Germany : western zones	4.7	0.7	1.5	1.3	0.8	*0.9*	0.8	0.5	1.9	2.7	142	6.8	2.1	31	16.5	8.2	50
Belgium-Luxembourg	1.9	1.1	2.4	*10.1*	0.6	*2.8*	0.4	0.3	2.5	0.8	32	7.8	5.6	72	15.6	20.7	133
Italy	1.3	*3.1*			0.7	*10.9*		.	1.3 [b]	1.0 [b]	77	12.2	9.5	78	15.5	24.5	158
Total of countries listed	10.3	6.6	4.2	12.2	2.1	*14.6*	2.8	3.4	12.2	12.5	102	149.0	122.7	82	180.6	172.0	95
Wool cloth																	
United Kingdom	—	—	0.2	*0.9*			0.4	*1.0*	2.7	3.0	111	18.4	18.4	100	21.7	23.3	107
France	2.2	*2.3*	0.2	0.2	—	—	0.1	*0.2*	0.5 [c]	1.2 [c]	240	3.5	2.9	83	6.5	6.8	105
Germany : western zones	0.1	0.1	—	0.3	—	—	—	—	0.2	0.3	150	0.1	0.2	200	0.4	0.9	225
Belgium-Luxembourg	0.2	0.1	0.3	*2.5*	—	0.2	—	—	0.7	0.4	57	1.4	0.8	57	2.6	4.0	154
Italy	1.4	*2.5*	.	.	—	—	—	*0.1*	— [b]	0.2 [b]	..	5.3	4.2	79	6.7	7.0	104
Total of countries listed	3.9	5.0	0.7	3.9	—	0.2	0.5	*1.3*	4.1	5.1	124	28.7	26.5	92	37.9	42.0	111

Sources : Statistics of the exporting countries.

a Excluding the exports to the French colonies, the data are (thousands of tons) . 1949, 2.2 , 1950, 2.0 , index 91

b The country specification in Italian export statistics is incomplete.

c Excluding the exports to Germany, the data are (thousands of tons) : 1949, 0.4 , 1950, 0.6 , index 150

mainly by Italy and Belgium. The expansion of trade along these particular channels has thus been sufficient to outweigh the effects of devaluation in altering the competitive position of different countries. Table 51 also indicates, however, that the behaviour of textile imports outside the liberalized sectors has been quite different. The increases in imports by O.E.E.C. members other than the four countries shown separately were very much smaller, and the shifts in origin corresponded roughly to the extent of devaluation by the various supplying countries.[1]

The great changes in international trade and production—particularly the growing shortages of raw materials—have given rise to new difficulties in the liberalization of trade in western Europe. Thus, Switzerland has expressed opposition to the principle of non-discrimination in the further lifting of import restrictions, because of the need to retain its bargaining power in obtaining imports of raw materials. A more general trend in the last few months is the shift in emphasis away from import restrictions to export restrictions. France, for example, has suspended the granting of export licences for scrap iron and has subjected exports of a number of non-ferrous metals to special licence. The United Kingdom has introduced export licensing for a large number of items, including various metals and alloys and certain chemicals (notably sulphuric acid), while Sweden has established export controls over wool, pig-iron and stainless steel, and Italy has done the same with respect to rubber, wood-pulp and textile fibres. These export restrictions grow out of the critical raw material shortages being experienced by European countries and may well tend to be intensified as long as these shortages continue.

[1] In overseas trade, the general decline in European exports of textiles was due to a tightening of restrictions in a number of import markets. The experience of European countries which devalued most seems to have been somewhat more satisfactory than that of the others, but the difference is not very marked; in cotton cloth, the United Kingdom's exports declined about as much as Italy's, and western Germany's exports fell sharply in nearly all its overseas markets. This is presumably due to the fact, mentioned in section 1 of this chapter, that export prices for textiles were rather flexible in national currencies, especially Italian export prices.

5. The Trade of Eastern European Countries

Trade between Eastern and Western Europe

In contrast to the lively growth of trade within each of the two areas, the general expansion in European production has not been accompanied by any rebirth of trade between eastern[2] and western Europe. This trade was at a very low level in 1949 compared with pre-war and receded even further in 1950. As shown in Table 52, exports fell both from east to west and from west to east—the first rather more than the second—but the change was not common to all countries or commodities.

The major exception to the general trend was the increase in western German exports to eastern Europe; these more than doubled, but still remained only about one-third of their pre-war volume.[3] Exports by other

Table 52

TRADE OF WESTERN EUROPEAN COUNTRIES WITH EASTERN EUROPE *a*

Millions of dollars in January-September 1949 prices, f.o b.

Country	Year	Imports	Exports
United Kingdom . . .	1949	203	133
	1950	254	121
Netherlands .	1949	116	81
	1950	56	47
Scandinavian countries *b*	1949	282	277
	1950	258	229
France .	1949	75	77
	1950	46	53
Germany : western zones .	1949	102	61
	1950	112	136
Italy, Belgium, Switzerland	1949	188	252
	1950	192	246
Other western European countries *c* .	1949	175	113
	1950	118	93
Total	1949	1,141	994
	1950	1,036	925

Sources. Trade statistics of western European countries. See Appendix B

a Bulgaria, Czechoslovakia, Hungary, Poland, Rumania, Yugoslavia and the U.S.S.R.

b Denmark, Finland, Norway and Sweden

c Austria, Greece, Iceland, Ireland, Portugal, Spain and Turkey

[2] For purposes of this analysis, eastern Europe comprises Bulgaria, Czechoslovakia, the Soviet Zone of Germany, Hungary, Poland, Rumania, the Soviet Union and Yugoslavia. This grouping is determined not only by the common or similar economic policies among most of these countries, but also by the lack of more than fragmentary information on their trade, except in so far as data can be derived from the statistics of other countries trading with them. For convenience of expression, the term "western Europe" is used to cover all other European countries.

[3] The data do not include trade between the western and eastern zones of Germany

western European countries, however, fell by 15 per cent in 1950, despite some increases in British exports to the Soviet Union, in Swedish exports to Poland, and in Italian exports to both of these markets. In addition, United States exports to most eastern European countries were drastically reduced in the course of 1950, and by the end of the year had become negligible. The single exception was Yugoslavia, whose imports from the United States were twice as great as in 1949[1] and accounted for an increasingly predominant part of total American exports to the area. Western Germany was the only other major source of larger imports into Yugoslavia. The expansion in both instances was financed by credits. While Yugoslavia's requirements of imports from other sources were increased by the complete stoppage of its trade with the rest of eastern Europe, its possibilities of covering imports from the west were reduced by the prolonged drought, which severely curtailed its exports and led to a dangerous depletion of foreign exchange reserves.

Table 53 shows a substantial change in the commodity composition of western European exports to eastern Europe between the two years. Exports of two main groups—metal and metal manufactures and machinery—increased substantially in volume and, in 1950, made up about one-half of the total, while exports of most other classes of goods declined. This shift seems to reflect the emphasis placed by eastern European countries on capital equipment essential to their industrial development.

[1] The share of the United States in total Yugoslav imports rose from 9 per cent in 1949 to 21 per cent in 1950, and that of other overseas countries from 13 to 16 per cent, while the proportion derived from western Europe was slightly less than two-thirds in both years.

Table 53

EXPORTS OF WESTERN EUROPEAN COUNTRIES AND OF THE UNITED STATES TO EASTERN EUROPE,[a] BY COMMODITY GROUPS

Millions of dollars in pre-devaluation 1949 prices, f.o.b.
Annual rates for first 9 months of each year

Exporting country / Commodity group	United Kingdom		Germany Western Zones		Scandinavian Countries[b]		Other European Countries[c]		Total		United States	
	1949	1950	1949	1950	1949	1950	1949	1950	1949	1950	1949	1950
1. Food	1	2	6	2	33	18	22	11	62	33	14	9
2. Raw materials	6	7	5	21	80	53	75	44	166	125	42	33
3. Metals and manufactures	15	13	6	44	28	23	70	55	119	135	1	5
4. Machinery	65	68	9	38	36	51	96	101	206	258	9	19
5, 6. Passengers cars and transport equipment	8	4	1	8	7	9	27	23	43	44	2	3
7. Chemicals and related products	10	4	11	16	8	8	38	24	67	52	3	5
8. Textiles and manufactures	11	9	—	2	4	6	39	28	54	45	3	1
9. Other manufactures	8	6	2	5	38	17	21	18	69	46	1	2
10. Unspecified	9	8	1	—	17	13	8	9	35	30	6	5
Total, groups 1-10	133	121	41	136	251	198	396	313	821	768	81	82

Sources see Appendix B.

NOTE — The value of the exports of principal western European supplying countries covers approximately 96 per cent of the total value of the exports of these countries to all eastern European countries

a Bulgaria, Czechoslovakia, Hungary, Poland, Rumania, Yugoslavia and the U S S R

b Denmark, Finland, Norway and Sweden.

c Belgium-Luxembourg, France, Italy, Netherlands, Portugal and Switzerland.

Western Germany made the main contribution to the increase in exports of metals and metal manufactures and machinery. The United Kingdom also increased its exports of machinery to the Soviet Union,[1] Sweden doubled its machinery exports to Poland, and increased them by 45 per cent to the Soviet Union, and Italy and Switzerland showed increases to various eastern European markets. Most of these machinery exports went to the Soviet Union, Poland and Czechoslovakia, whereas the other and less industrialized eastern European countries obtained only negligible amounts. In total, the volume of machinery exported from western Europe to eastern Europe exceeded the pre-war volume in 1950, other western European countries having filled the gap left by western Germany, whose machinery exports were still less than one-third of the pre-war volume, despite the large increase during the year. Total supplies of machinery to the area from outside sources nevertheless remained smaller than before the war on account of the decline in United States exports to eastern Europe to one-quarter of their pre-war level.

There were also substantial changes, both up and down, in the flow of trade from eastern to western Europe, indicative of the instability which has come to characterize trading relationships between the two areas. While western Germany obtained larger supplies of meat, eggs and sugar from eastern European countries, its imports of oats and rye, chiefly from Poland and Hungary, fell sharply in 1950. The considerable increase in livestock numbers in these countries has raised their requirements of feedingstuffs and diminished their export capacity, affecting not only coarse grain, but also rye, which is being increasingly used for animal feeding. In addition, as noted in Chapter 2, grain production in Hungary was adversely affected by drought. All told, bread grain deliveries by eastern Europe dropped by almost 50 per cent, imports into western Germany, the Netherlands and France accounting for most of the decline.

The sharp fall in imports into France from eastern Europe was mainly caused by the drop in its purchases of Polish coal from nearly 2 million tons in 1949 to only 670,000 tons in 1950. This accounts for most of the decline in total imports of Polish coal into western European countries from 11.9 to 10.3 million tons.

[1] Whereas western German exports rose to all eastern European countries except the Soviet Union, British exports increased only to the Soviet Union.

In contrast to the general trend, the United Kingdom's imports from eastern Europe increased substantially. The rise was made up of increased deliveries of coarse grain and timber [2] by the Soviet Union and a considerable increase in meat imports from Poland. Total timber imports into western Europe from eastern European sources declined, however, largely owing to a sharp drop in Dutch timber purchases from the Soviet Union, Yugoslavia and Czechoslovakia.

On balance, trade between the two areas continued to yield a surplus in favour of eastern Europe, particularly the Soviet Union, because of its grain and timber exports to the United Kingdom. Its surplus with the United Kingdom in 1950 was equivalent to about $60 million, and it also had a surplus of almost $40 million with the United States through substantial exports to that country, while its imports of American goods virtually came to a standstill. These balances provided funds for settling accounts with other countries, including the purchase of raw materials from overseas sources.

Trade Expansion in Eastern Europe

Trade among eastern European countries appears to have continued a rapid increase in 1950, although quantitative information is almost wholly lacking with regard to its level, distribution, and commodity composition. From the fragmentary data available, the increase would appear to have been in the order of 25 per cent above the 1949 level, which in turn can be very roughly estimated at about $2 billion.[3]

A considerable part of the expansion in 1950 appears to have been in the trade of the Soviet Zone of Germany with the smaller neighbouring countries of eastern Europe, reflecting the recovery of production in eastern Germany during the year. This development, together with the substantial increase of trade

[2] Grain imports of the United Kingdom from the Soviet Union increased from 1949 to 1950 as follows (in thousands of tons) . barley, 145 to 330 , oats, 10 to 85, and maize, 52 to 271 A timber contract was signed in June 1950 for the delivery of 153,000 standards against payment in sterling

[3] The estimated increase is pieced together from a variety of statements from eastern European countries on the percentage distribution of their trade and the amount of trade planned under their bilateral agreements, expressed either in absolute figures or merely as percentage increases over the 1949 level. The 1949 level is estimated on the basis of planned percentage increases above the 1948 level, the last year for which trade statistics were available for most of these countries.

among the other smaller countries of eastern Europe, contrasts to some extent with the growth of trade in earlier years, which had been centred mainly in the trade of each of these other countries with the Soviet Union.

From published information giving the types but not the quantities of goods to be exchanged under trade agreements, a qualitative impression may be drawn of the pattern of trade among the eastern European countries. Thus, the Soviet Union both exports and imports investment goods. It is also an exporter of industrial raw materials to all the other eastern European countries and, along with Rumania and Bulgaria, supplies foodstuffs to Czechoslovakia and the Soviet Zone of Germany, the two food deficit countries of the area. Raw or partly manufactured materials which are specific to each of the countries of the area are exported by them, both to the Soviet Union and to each other. These include petroleum from Rumania, coal and iron and steel from Poland, and zinc and lead from both Poland and Bulgaria. The more highly industrialized countries, notably Czechoslovakia [1] and the Soviet Zone of Germany, are suppliers of equipment and machinery to the less developed countries and to the Soviet Union. Consumers' goods—notably textiles from Poland, Czechoslovakia and Hungary, and glassware and porcelain from eastern Germany—are exported to the Soviet Union and traded among these four countries.

Official comment on the development of trade among eastern European countries indicates that it is being increasingly co-ordinated under long-term agreements with the object of fitting national production plans and existing agreements for bilateral co-operation into broader development schemes for the area as a whole.

[1] Czechoslovakia is expected, under its revised industrial plan, to increase exports of equipment to the other countries of the area.

6. The Overseas Balance of Payments

Goods and Services Account

Europe's balance of payments was much more favourable in 1950 than in the preceding year and, on present prospects, more favourable than it seems likely to be again in the near future. The very changes which occurred in 1950 were indicative of the cross currents and new forces at work : the deficit on goods and services with the United States, which had appeared as the hard core of Europe's payments problems, was cut from $3.2 billion to only half that amount, but the deficit with other overseas countries rose abruptly from $600 million to $900 million.

The greater part of the improvement in the goods and services balance with the United States was in a reduction of the trade deficit, which, as shown in Table 54, dropped from $3 3 billion in 1949 to

Table 54

EUROPE'S BALANCE OF PAYMENTS ON GOODS AND SERVICES

Billions of current dollars

Item	1948			1949			1950		
	United States	Other overseas countries	Total	United States	Other overseas countries	Total	United States	Other overseas countries	Total
Europe's overseas imports (f o b)	4 6	9 8	14 4	4 4	9.1	13.5	3 6 [a]	8.9	12 5 [a]
Europe's overseas exports (f o b)	1 3	7 5	8 8	1.1	8.3	9.4	1.6	8 0	9 6
Balance on trade account . .	−3 3	−2.3	−5 6	−3 3	−0.8	−4.1	−2 0	−0.9	−2.9
Income from investments (net)	—	+0 4	+0 4	—	+0 4	+0 4	+0 1	+0.4	+0.5
Transportation (net)	−0 3	+0.4	+0.1	−0 2	+0 5	+0 3	—	+0 5	+0.5
Other services (net)	+0 2	—	+0 2	+0.3	−0 7	−0.4	+0.3	−0.9	−0 6
Balance on services account	−0 1	+0 8	+0 7	+0.1	+0.2	+0.3	+0.4	—	+0 4
Balance on goods and services	−3 4	−1.5	−4.9	−3 2	−0 6	−3 8	−1.6	−0.9	−2 5

Sources The table has been prepared jointly by the Balance of Payments Division, International Monetary Fund, and the Research and Planning Division, Economic Commission for Europe See Appendix B More data on national balances of payments will be found in the forthcoming *Balance of Payments Yearbook, 1949-1950*, International Monetary Fund.

[a] Europe's imports from the United States include $446 million of military shipments transferred under the Mutual Defense Assistance Program

$2.0 billion in 1950. If military goods financed by the United States under M.D.A.P.[1] are excluded, the deficit in 1950 was as little as $1.6 billion. Similarly, Europe's deficit with Canada fell from $566 million in 1949 to less than one-third of that figure in 1950.[2] As indicated by the following figures, the greater part of the decrease in the trade deficit up to the middle of 1950 was accounted for by the progressive decline in imports from North America ; in the second half of the year, the rise in exports became the dominant factor :

Europe's Trade with North America[3]

(millions of current dollars)

	Imports (f o b)	*Exports (f o b)*	*Balance*
1949 first half	2,711	658	2,053
second half	2,313	616	—1,697
1950 first half	1,791	715	- 1,076
second half	1,691	1,101	- 590

As discussed in earlier sections of this chapter, the factors responsible for this striking change included the decreased dependence on American supplies, thanks to rising European production, and the great increase in European exports to the United States, stimulated by the rapidly rising level of economic activity in that country in the second half of the year. Exports of various European manufactured products were doubtless encouraged by the devaluation of most western European currencies towards the end of 1949, but this also had the effect of greatly reducing the rise in the value compared with the rise in the volume of trade : in pre-devaluation prices, the increase in European exports to the United States and Canada in 1950 was about $1 billion, while in current prices the rise was only $540 million.[4]

The net effect of these movements has been a striking rise in the proportion of Europe's imports from North America covered by its exports to that area. Table 55 shows that, for Europe as a whole, this proportion rose from only one-quarter in the first half of 1949 to two-thirds in the second half of 1950. This change was common to all European countries,[5] but in absolute terms the reduction in the deficit was concentrated in the trade of four major countries, as seen below :

Table 55

PERCENTAGE OF IMPORTS OF EUROPEAN COUNTRIES FROM THE UNITED STATES AND CANADA COVERED BY EXPORTS

Country	1949		1950	
	First half	Second half	First half	Second half
Denmark	6	11	13	24
Germany : western zones	8	7	16	42
Italy	9	14	16	44
Netherlands	14	19	16	51
Belgium-Luxembourg	40	28	46	55
Norway	25	27	40	55
France	10	16	22	60
United Kingdom	36	34	59	81
Sweden	50	79	66	87
Switzerland	47	74	82	91
Finland	107	108	145	164
Eastern European countries [a]	94	118	133	144
Other European countries [b]	21	16	30	54
Total Europe	24	27	40	65

Sources The figures have been derived from Table XXX in Appendix A, with imports adjusted to an f o b basis

[a] Bulgaria, Czechoslovakia, the Soviet Zone of Germany, Hungary, Poland, Rumania, Yugoslavia and the U S S R

[b] Austria, Greece, Iceland, Ireland, Portugal, Spain and Turkey

Trade Deficit with the United States and Canada

(millions of current dollars)

	United Kingdom	*France*	*Western Germany*	*Italy*	*Rest of Europe*
1949 first half	474	301	345	252	681
second half	465	174	332	158	568
1950 first half	195	148	158	146	429
second half	93	64	115	70	248

In trade with overseas areas other than North America, Europe's trade deficit had fallen in 1949 to only some $300 million, compared with six times that amount in 1948 Europe's exports to these countries in 1950 increased in volume at least as much as its imports from them, if not more, but the deterioration in its terms of trade produced a rise of about $700 million in its deficit on merchandise account.

[1] Mutual Defense Assistance Program.

[2] The decrease in the European deficit with Canada between 1949 and 1950 was $401 million, of which the United Kingdom, which normally conducts the greater part of Europe's trade with Canada, accounted for $339 million

[3] See Appendix A, Table XXX Figures are based on European statistics adjusted to an estimated f o.b. basis and therefore do not correspond with those in Table 54.

[4] See Table 43

[5] For eastern European countries, however, the increasing ratio is due simply to the fact that imports from the United States fell more sharply than exports to the United States.

The increase was mainly in trade with affiliated overseas countries (particularly the members of the sterling area) as may be seen in the following summary figures :

Europe's Trade with Overseas Areas other than North America
(millions of current dollars)

	Affiliated countries		*All other*	
	1949	*1950*	*1949*	*1950*
Imports (f o b)				
United Kingdom	2,845	2,486	971	982
Western Germany	226	441	227	240
Rest of Europe . .	2,492	2,617	1,517	1,767
Exports (f o b)				
United Kingdom .	3,212	2,695	899	777
Western Germany	71	143	58	225
Rest of Europe	2,311	2,200	1,414	1,511
Balance (f o b)				
Total Europe	+ 31	−506	−344	−476

The United Kingdom and western Germany were responsible for most of the change ; the greater part of the decline in the British surplus was accounted for by trade with India and South Africa, which introduced severe import restrictions, and the German deficit increased because of the great rise in the volume of its imports from the overseas sterling area.[1] The British experience was rather similar in other overseas markets outside the affiliated areas, its exports to Argentina and Brazil in particular being limited by the sterling shortages experienced in those countries, while its imports from Latin America increased Western Germany's trade with these countries, on the other hand, developed along lines quite different from its mounting import surplus with the sterling area . its imports increased only moderately, while its exports expanded rapidly. By the end of 1950, therefore, western Germany's overseas trade deficit was largely concentrated in the United States, where it was declining, and in the overseas sterling area, where it was growing.

The development in Europe's overseas payments position on services was similar to that in the trade balance there was an improvement in the accounts with the United States and a deterioration in the accounts with other overseas countries. Increases in earnings from investments and in receipts from American tourists contributed moderately to the rise in the surplus on services with the United States, but the dominant factor was the disappearance of the shipping deficit as imports of coal and other heavy cargo in American vessels declined.[2]

In transactions with overseas countries other than the United States, the miscellaneous debit item " other services " weighed heavily in the balance and accounted for the deterioration in the services account in 1950. Little is known about this item,[3] derived as it is, not from direct estimates, but as a residual from a consolidation of balance-of-payments statements of individual European countries, although other information indicates that it may reflect increased outlays, particularly for military purposes, by European Governments in overseas territories.

Rise in Gold and Dollar Holdings

Despite the striking reduction in Europe's deficit on goods and services with the United States in 1950, the deficit was by no means eliminated and that with other overseas areas increased. It is therefore remarkable that European gold and dollar assets nevertheless rose during the year by $1 9 billion, most of it in gold.[4] It is equally noteworthy that 85 per cent of this increase accrued to the reserves held by the United Kingdom. Table 56 shows that the increase in the gold and dollar reserves of Continental European countries was relatively small and, in some instances, holdings declined. Superficially regarded, there would appear to be a rough relationship between these movements and devaluation . Swiss and Italian reserves scarcely changed and Belgium experienced a considerable drain, whereas several of the countries which devalued by 20 per cent or more were able to increase their gold and dollar holdings. As will be seen, however, other factors influenced these changes.

[1] Most of the increase in the trade deficit of " Rest of Europe " with affiliated overseas areas was due to the Netherlands and Belgium, which appear to have increased their imports heavily. In the case of other overseas areas, Italy, whose exports to Latin America were handicapped by payments difficulties, seems to account alone for about one-half of the deterioration in the trade balance.

[2] Estimates given in Table 54 for Europe's service transactions in 1948 and 1949 have been considerably revised since the publication of last year's SURVEY. These revisions are largely accounted for by new and more complete balance-of-payments estimates now available for individual European countries.

[3] See Appendix B.

[4] The figure of $1 9 billion includes allowances for unreported gold holdings and therefore differs from the total accounted for in Table 56.

Table 56

GOLD AND DOLLAR ASSETS OF EUROPEAN COUNTRIES

Millions of current dollars

Country	End of year				Change in	
	1938	1948	1949	1950	1949	1950
United Kingdom [a]	3,885	1,856	1,688	3,300	−168	+1,612
Switzerland [b]	920	1,886	2,021	2,020	+135	− 1
France [c]	2,952	741	695	784	− 46	+ 89
Belgium-Luxembourg	773	753	818	703	+ 65	− 115
Italy	216	446	560	560	+114	−
Netherlands	1,096	290	366	505	+ 76	+ 139
Germany : western zones [d]	20	179	149	222	− 30	+ 73
Sweden	321	130	160	204	+ 30	+ 44
Rest of Europe [e]	1,460	1,270	1,179	1,135	− 91	− 44
Total Europe	11,643	7,551	7,636	9,433	+ 85	+1,797

Sources *International Financial Statistics*, International Monetary Fund, Washington, D C , *Federal Reserve Bulletin*, Federal Reserve System, Washington, D C

NOTE — "Dollar assets" refer to holdings—both public and private — of short-term dollar assets in the United States, as reported by United States banks

a Officially reported figures covering gold and official holdings of United States and Canadian dollars

b Excluding holdings of the Bank for International Settlements

c Excluding holdings of gold by the Stabilization Fund for all years except 1938

d Including accounts opened by occupation authorities for trade purposes

e Excluding gold holdings of the U S S R

The increases achieved in the gold and dollar holdings of the United Kingdom and other European countries were possible, of course, only because of the continuation of aid by the United States on a scale which, although sharply reduced compared with 1949, was more than adequate to cover the goods and services deficit with both the United States and other areas as well. This, however, had been equally true in 1949, as may be seen in Table 57, yet in that year most European countries achieved at best only moderate increases in gold and dollar reserves, and the United Kingdom suffered a substantial drain, particularly during the first three quarters of the year.[1] The explanation of the great changes in Europe's gold and dollar reserves from 1949 to 1950 must therefore be sought in other developments, of which two would seem to be of chief importance. One of the important influences appears to have been the cessation and reversal of the outflow of private capital which, seeking either refuge or speculative gain abroad, had produced a heavy drain on European currency reserves, particularly on those of the United Kingdom.[2] By their nature, these capital movements tend to escape recording and are difficult to estimate, but their influence is indicated by the very speed with which British reserves rose immediately after devaluation. This movement seems to have been continued subsequently by widespread speculation regarding a possible increase in the exchange value of the pound, as may be reflected, for example, in the increase of approximately $135 million in so-called "American account" sterling balances in the second half of 1950.[3]

The second and apparently far more important development accounting for the change in European gold and dollar reserves in 1950 was the reversal in the flow of dollar settlements between Europe and third countries overseas. As may be seen in Table 57, European countries made multilateral settlements of about $2 billion to overseas countries

[1] From the beginning of 1949 to 18 September, the eve of devaluation, the gold and dollar reserves held by the United Kingdom fell by $516 million, but two-thirds of this loss was made up by the inflow during the remainder of the year.

[2] See last year's SURVEY, p. 117 and pp 124-126. In Part I of Table 57 (see next page), private capital movements are entered, so far as they can be estimated, on a net basis.

Apart from private capital movements, the entries made in Part I of Table 57 include various other adjustments necessary to compute the deficit for which financing is required Among these adjustments are private donations and various official capital transactions (of which the financing by the United States of M D A P shipments is the most important in 1950) which are not motivated primarily for the purpose of closing the balance-of-payments gap, and indeed (as in the case of colonial development projects undertaken by European countries) may have the effect rather of increasing the size of the over-all deficit.

[3] *United Kingdom Balance of Payments, 1946 to 1950 (No 2)*, p. 29, Cmd. 8201, His Majesty's Stationery Office

Table 57

THE FINANCING OF EUROPE'S OVERSEAS DEFICIT

Billions of current dollars

Item	1948			1949			1950		
	United States	Other overseas countries	Total	United States	Other overseas countries	Total	United States	Other overseas countries	Total
I. Balance on goods and services and other transactions making up the deficit :									
Balance on goods and services	−3 4	−1.5	−4.9	−3,2	−0 6	−3.8	−1 6	−0.9	−2.5
Private donations	+0 4	−0 1	+0 3	+0 4	−0 1	+0 3	+0 3	−0 1	+0.2
Private capital movements	+0.2	−0 1	+0 1	−0 1	−0.4	−0.5	−0.1	−0.1	−0.2
Special official financing (debt settlements, specific investment projects, etc)	−0 2	−0 3	−0 5	+0 2	−0 4	−0.2	+0 5	−0.3	+0.2
Total deficit or surplus to be financed									
Unadjusted	−3 0	−2 0	−5 0	−2.7	−1 5	−4.2	−0 9	−1.4	−2.3
Adjustments	—	−0 1	−0.1	−0 2	+0 7	+0 5	−0 1	+0.5	+0.4
Adjusted	−3 0	−2.1	−5 1	−2.9	−0 8	−3 7	−1 0	−0.9	−1.9
II. Official financing of a compensatory nature :									
Government grants	+3 2	—	+3 2	+4.1	—	+4 1	+2.7	—	+2.7
Credits received or extended	+1 1	+0.5	+1 6	+0.7	−0 5	+0 2	+0.2		+0.2
Financing by international institutions	+0 3	—	+0 3	—	—	—	—	—	—
Movement in sterling balances	—	−0.2	−0 2	—	−0 5	−0 5	—	+0.9	+0.9
Movement in U S. dollar balances	−0.3	—	−0 3	−0 1	—	−0 1	−0.2	—	−0.2
Gold movements	+0 9	−0.4	+0 5	+0 2	−0 2	—	−1 3	−0.4	−1.7
Total compensatory official financing	+5 2	−0 1	+5 1	+4 9	−1 2	+3.7	+1 4	+0 5	+1.9
III. Multilateral settlements in U.S. dollars									
ERP reimbursement for European purchases outside the United States	−0 8	+0.8	—	−1.0	+1.0	—	−0.7	+0.7	—
Other dollar settlements by European countries outside the United States and errors and omissions	−1 4	+1 4	—	−1 0	+1 0	—	+0.3	−0.3	—
Total multilateral settlements in U.S. dollars	−2 2	+2.2	—	−2 0	+2 0	—	−0.4	+0 4	—

Sources Balance of Payments Division, International Monetary Fund More detailed data will be found in the Fund's forthcoming *Balance of Payments Yearbook, 1949-1950*

NOTE — A plus sign indicates a credit transaction involving the receipt of funds by Europe from overseas countries (such as the sale of goods or gold or the receipt of a loan or gift), and a minus sign a debit transaction involving the payment of funds by Europe to overseas countries All items are entered on a net basis See Appendix B Detailed definitions of various items in the table are given in the *Balance of Payments Yearbook*, International Monetary Fund

outside the United States in 1949, half of which were through the direct allocation by the United States of E.R.P. funds for offshore purchases and the other half from other dollar resources. In 1950, the situation was very different. While direct allocations of Marshall Aid continued to be made to the extent of $700 million for European purchases outside the United States, European countries were able to draw dollars on other accounts from overseas countries to the amount of some $300 million. In addition, about $400 million was received directly in the form of gold, or roughly twice as much as in 1949.[1]

[1] As explained below, $281 million of this amount accrued to the United Kingdom through gold sales by the producing countries of the sterling area. In addition, the United Kingdom purchased some gold from Canada during 1950.

The reversal of the flow of dollar settlements was concentrated in the relationships between the United Kingdom and the overseas sterling area. This becomes clear from an examination of the figures in Table 58, derived from official United States balance-of-payments estimates and other reports on its overseas transactions. The table shows the amount of United States Government aid received by various countries or areas and how the aid has been used.[2] No great change from 1949 to 1950 is seen in the pattern of dollar payments by European countries, other than

[2] Table 58 does not literally show the uses made of United States financial aid, since the greater part of it is allocated for specific purchases or other payments, but the effect is to contribute to the total dollar resources of other countries an amount equivalent to the aid extended

Table 58

DOLLAR AID AND THE PATTERN OF INTER-REGIONAL DOLLAR SETTLEMENTS

Millions of current dollars

Item	Year	EUROPEAN CURRENCY AREA				Canada	Latin-American republics	All other countries [a]	Total world
		United Kingdom	Overseas sterling area	Other European countries	Dependent overseas territories of other European countries				
I. Grants and credits received from the United States Government	1949	+1,048	+ 2	+3,676	+ 1	+ 11	+ 70	+1,139	+5,947
	1950	+ 641	—	+2,755	+ 4	+ 7	+ 24	+ 861	+4,292
II. Balance with the United States on goods and services, private donations and capital movements	1949	− 291	−288	−2,613	−126	−421	− 280	−1,197	−5,216
	1950	+ 83	+474	−1,583	+ 63	− 305	−108	− 305	−1,681
III. Dollars paid (−) or received (+) for E R P. "offshore purchases"	1949	− 511	+ 2	− 528	+119	+418	+324	+ 176	—
	1950	− 343	+ 1	− 381	+ 91	+263	+213	+ 156	—
IV. Dollars used to build up balances in the United States (−) or drawn from balances in the United States (+)	1949	+ 54	− 44	− 49	+ 36	− 80	−212	+ 376	+ 81
	1950	+ 94	− 27	− 247	− 36	− 31	−136	− 485	− 868
V. Dollars used to buy gold from the United States (−) or acquired through gold sales to the United States (+)	1949	+ 446	+195	− 218	− 21	+ 10	−131	− 117	+ 164
	1950	−1,020	+ 12	− 324	− 7	− 99	−162	− 143	−1,743
VI. Residual representing dollars transferred to (−) or received from (+) other countries, and also errors and omissions in the estimates	1949	− 746	+133	− 268	− 9	+ 62	+229	− 377	− 976
	1950	+ 545	−460	− 220	−115	+165	+169	− 84	—

Sources Table XXXI, Appendix A, and statements published by the Economic Co-operation Administration. See Appendix B

a Including international institutions.

the United Kingdom, taken as a group. In both years most of the aid received was used to settle the direct deficit with the United States, although this was very much smaller in 1950 than in 1949. A substantial part was also used for off-shore purchases, principally in Latin America.[1] Another part served, in effect, to permit additions in both years to European gold and dollar reserves, although the figures for gold purchases in 1950 overstate the increase in the holdings of continental European countries, since some of them were obviously also making gold transfers to outside areas. After taking account of the foregoing uses of dollar funds, however, the data for both 1949 and 1950 show a residual which must be taken to represent (apart from errors and omissions in the estimates) the net transfer of dollars to third countries for the settlement of trade and services deficits or for capital movements.

The United Kingdom shows a quite different pattern and development. Its direct deficit with the United States in 1949 was small in relation to the amount of aid received and in 1950 shifted to a surplus.[2] In both years a large but declining part of the total was used for offshore purchases, chiefly in Canada, with which the United Kingdom has usually had a substantial deficit. It is also clear, however, that in 1949 the United Kingdom had had to liquidate in the United States some $500 million of its gold and dollar reserves to obtain funds for still other transfers to third countries which remained uncovered by Marshall Aid for offshore purchases.[3] It was in this respect that the position of the United Kingdom changed most fundamentally in 1950 : in place of the heavy dollar transfers to third countries made the year before, it appears to have received more than $500 million from them. This change, and the shift from a deficit to a surplus in its balance with the United States, were the major developments permitting the United Kingdom to acquire more than $1 billion worth of gold from the United States in 1950 in place of the heavy drain of the year before.

The overseas sterling area was the main source of the dollars received by the United Kingdom from overseas areas, other than the United States, in 1950. Table 20 shows that Canada and the Latin-American countries themselves continued, as in 1949, to receive dollars on a substantial scale through multilateral settlements, in addition to funds gained through offshore purchases, and that they used these receipts partly to settle their own deficits with the United States and partly to add to their gold and dollar holdings. But the position of the overseas sterling area changed dramatically : instead of a collective deficit of almost $300 million with the United States in 1949, the countries of this group had a surplus of almost $500 million with the United States in 1950. As will be further discussed below, it is characteristic of the monetary system of the sterling area that little of this surplus was added to the dollar balances of overseas sterling countries, virtually all of it being transferred to the central dollar pool.

The Changed Position of the Sterling Area

It becomes apparent from the preceding analysis that the transformation of the pattern of international dollar settlements in 1950 is attributable not so much to the change in the payments position of European countries taken collectively as to the change in the position of the sterling area, with the United Kingdom

[1] Latin America received about one-half—$225 million in 1949 and $203 million in 1950—of the total offshore purchases made outside Europe for the account of European countries other than the United Kingdom Canada's share of these purchases was $68 million in 1949 and $49 million in 1950, while the remainder was accounted for largely by oil purchases in the Netherlands Antilles and the Middle Eastern oil area Since purchases in the latter area cannot be broken down by countries, the receipts of the overseas sterling area from offshore purchases in Table 58 are understated.

[2] It is likely that the United Kingdom surplus on goods, services, private donations and capital with the United States, shown for 1950 in Table 58, is overstated, and the figure for American aid is understated These figures exclude transfers to the United Kingdom under the Mutual Defense Assistance Program and their financial offset, for which detailed geographical break-down is not published Moreover, the United Kingdom dollar surplus of $83 million in the table excludes imports from the United States of certain "special category" goods paid for in cash Shipments of this latter type amounted in 1950 to $41 million for the entire sterling area, most of this presumably going to the United Kingdom See Appendix B

[3] It should be noted, however, that the residual figure in 1949 for the United Kingdom and the other countries or areas shown can be taken as a rough indication only of the pattern of settlements and not of the absolute amounts, because of the over-all errors and omissions figure of almost $1 billion in the United States balance-of-payments estimates for the year. For reasons explained in last year's SURVEY, this figure in itself gives some indication of the importance of unrecorded capital transactions.

as its financial centre. The following summary, derived from the official British balance-of-payments estimates, indicates that the United Kingdom and the rest of the sterling area shared more or less equally [1] in the adjustments which converted a net drain of $167 million on gold and dollar reserves in 1949 into a net increase of $1,612 million in 1950—that is, a total shift of almost $1.8 billion : [2]

Summary of Changes from 1949 to 1950 in the Sterling Area's Gold and Dollar Transactions tending to Increase (+) or Decrease (−) Reserves [a]
(millions of current dollars)

I. *United Kingdom account*			
Trade balance	+598		
Services balance	+209		
Capital movements	+310		+1,117
II *Rest of sterling area account*			
Balance with the dollar area	+873		
Contribution from new gold production [b]	+ 47		+ 920
III *Whole sterling area account*			
Gold and dollar settlements with non-dollar countries .	+299		+ 299
IV *Financing account*			
Decrease in E R P grants and credits	−434		
Decrease in drawings on I M F	− 52		
Decrease in drawings on Canadian loan	− 71		− 557
Net change (equalling net shift from loss of $167 million in gold and dollar reserves in 1949 to an increase of $1,612 million in 1950) .			+1,779

a Computed from Cmd 8201. The data cover sterling area transactions not only with the United States, but also with Canada and other dollar countries (according to the British definition) as well as gold and dollar settlements with non-dollar countries. In Table 58 (derived from United States balance-of-payments sources) these payments to countries other than the United States are deduced from the movement of the residual item and from the known payments under E R P offshore procurements.

b Increase in gold sales to the United Kingdom by the rest of the sterling area.

It is clear from these figures, and from the more detailed estimates derived from other sources in Table 59, that the greater part of the change was in the balance on merchandise trade, imports from the United States and Canada falling by $900 million and exports to these countries rising by $500 million, although there were also significant changes in the United Kingdom's dollar balance on service transactions and in capital movements.

As seen in previous sections of this chapter, many forces, of which devaluation is one, have contributed to these changes. The effect of devaluation and of the change in speculative factors which followed is perhaps most directly expressed in the reversed flow of capital movements. Its influence on the services balance is more uncertain : there is little reason to think that it changed the competitive position of British petroleum and shipping companies, whose operations are major elements in the services account.[3] The reduction in imports, divided in roughly equal amounts between the United Kingdom and the rest of the sterling area, was determined in the first instance by joint agreement during the pre-devaluation sterling crisis in 1949, which continued to affect the level of dollar imports long after the dollar position had begun to improve in other respects. Devaluation undoubtedly facilitated this reduction in dollar imports in the overseas sterling countries by the price advantage conferred on British manufactures, but there is no reason to suppose that the United Kingdom's own imports from the dollar area, already severely limited to essentials, were further reduced appreciably because of the altered currency and price relationships. On the side of exports to the United States and Canada, the improved competitive status of British goods undoubtedly helped to stimulate sales. But the dominant factor, certainly in the greatly expanded exports of sterling area raw materials to North America, was the domestic business recovery in the United States and the rise in dollar prices of these goods, just as the setback in 1949 had depressed sterling area exports to the American market.[4]

[1] For the purpose of this comparison, the change in capital movements may be excluded, since they may relate to transactions with the rest of the sterling area even though reflected in the accounts of London banks (For instance, the London balances of American banks may serve to finance trade with any part of the sterling area.) Unfortunately, it is not possible to allocate, on the basis of the official balance-of-payments statements, the gold and dollar settlements with non-dollar countries as between the United Kingdom and the rest of the sterling area.

[2] The following discussion refers generally to the rest of the sterling area, which includes not only the overseas sterling countries, but also Ireland, Iceland and British dependencies in Europe. Owing to the nature of statistical data used, the separation of European sterling countries is not possible. It is clear, however, that the main elements of the striking change in the position of the rest of the sterling area can be attributed to the overseas members of the group.

[3] Oil prices were not reduced in terms of dollars after devaluation. On the shipping market, the effect of devaluation was largely limited to tramp charter transactions, "conference" rates for regular liner freight traffic appear to have remained relatively stable for a time after devaluation · decreases which were eventually announced early in 1950 were determined by the various traffic routes and not by the nationality of the carriers.

[4] See Appendix A, Table XXXII, for data on the changes in quantity and value of the products exported by the sterling area to the United States.

Table 59

BALANCE ON GOODS AND SERVICES OF THE STERLING AREA WITH THE UNITED STATES AND CANADA AND WITH CONTINENTAL EUROPE

Millions of current dollars

Item	Year	Rest of Sterling Area [a]				United Kingdom				Total Sterling Area		
		United States and Canada	Continental Europe [b]	United Kingdom	Total of areas listed	United States and Canada	Continental Europe [b]	Rest of Sterling Area	Total of areas listed	United States and Canada	Continental Europe [b]	Total of areas listed
Exports, f.o.b.	1948	1,240	1,170	2,650	5,060	690	1,680	2,980	5,350	1,930	2,850	4,780
	1949	1,060	1,240	2,810	5,110	620	1,650	3,480	5,750	1,680	2,890	4,570
	1950	1,420	1,500	2,540	5,460	740	1,640	2,800	5,180	2,160	3,140	5,300
Imports, f.o.b.	1948	1,670	740	2,980	5,390	1,360	1,630	2,650	5,640	3,030	2,370	5,400
	1949	1,460	800	3,480	5,740	1,430	1,890	2,810	6,130	2,890	2,690	5,580
	1950	970	820	2,800	4,590	990	1,790	2,540	5,320	1,960	2,610	4,570
Trade balance	1948	−430	+430	− 330	− 330	−670	+ 50	+ 330	−290	−1,100	+480	− 620
	1949	−400	+440	− 670	− 630	−810	−240	+ 670	−380	−1,210	+200	−1,010
	1950	+450	+680	− 260	+ 870	−250	−150	+ 260	−140	+ 200	+530	+ 730
Services (net) . .	1948	−180	− 20	− 460	− 660	−110	+160 [c]	+ 460	+510	− 290	+140	− 150
	1949	−160	− 20	− 370	− 550	+ 60	+170 [c]	+ 370	+600	− 100	+150	+ 50
	1950	−140	− 20	− 460	− 620	+230	+290 [c]	+ 460	+980	+ 90	+270	+ 360
Balance on goods and services . .	1948	−610	+410	− 790	− 990	−780	+210	+ 790	+220	−1,390	+620	− 770
	1949	−560	+420	−1,040	−1,180	−750	− 70	+1,040	+220	−1,310	+350	− 960
	1950	+310	+660	− 720	+ 250	− 20	+140	+ 720	+840	+ 290	+800	+1,090

Sources : see Appendix B

[a] All sterling area countries except the United Kingdom.

[b] Europe excluding the United Kingdom, Ireland and Iceland

[c] Including service transactions with the dependent overseas territories of European non-sterling countries

Table 59 also shows, alongside the decrease in the sterling area's goods and services deficit with the United States and Canada, an increase in its surplus with Continental Europe from $350 million in 1949 to $800 million in 1950—a change of considerable consequence to the development of payments relationships among western European countries. Expressed in current dollar values, the change would seem to have been accounted for mainly by a rise in the exports of overseas sterling countries and by a fall in the United Kingdom's imports in its trade with the Continent, together with an increase in the surplus on services. These movements were, however, heavily influenced by the changes in price levels discussed earlier in this chapter : the volume of the United Kingdom's exports to other European countries rose from 1949 to 1950, and there seems also to have been some increase in the volume of its imports.

In transactions with North America and Europe combined, therefore, the sterling area's balance on goods and services improved by more than $2 billion from 1949 to 1950, shifting from a deficit just under $1 billion to a surplus of slightly more than this amount. It may be seen from Table 59 that the United Kingdom and the rest of the sterling area contributed about equally to this improvement if their transactions with each other are excluded. These transactions within the area are, in fact, largely divorced in the short run from the flow of gold, dollars or other foreign exchange to or from the central reserves—a fact of prime importance to an understanding of the reserve position of the United Kingdom. Transfers of foreign exchange to or from the central pool are determined rather by the surplus or deficit position of the rest of the sterling area and are offset by counter movements in sterling balances in London. This becomes clear from the following recapitulation of transactions between the

United Kingdom and the rest of the sterling area in 1950 : [1]

	Millions of current dollars	
Net claims for sterling by the rest of sterling area		
Rest of sterling area surplus with dollar area	+ 514	
R S A. surplus with O E E C countries .	+ 414	
R.S.A surplus with other countries	+ 87	
R.S.A. gold sales to United Kingdom	+ 281	
Capital movement from United Kingdom to R S A. .	+ 353	
Other transactions	+ 51	+1,700
Net use of sterling by the rest of sterling area		
R.S A. current account deficit with United Kingdom	— 630	
Increase (—) in R S.A. sterling balances	—1,070	—1,700

[1] Figures have been derived from Tables 9 and 12 in *United Kingdom Balance of Payments 1946 to 1950 (No. 2)*, Cmd 8201, His Majesty's Stationery Office.

It is thus seen that only a part of the foreign exchange receipts of the overseas sterling area was necessary to balance current accounts with the United Kingdom, the greater part being transferred against increased sterling balances. Looked at from the standpoint of the United Kingdom, it is equally clear that only a part of the rise in its gold and dollar holdings resulted from the change in its own balance of payments, and this part was achieved partly by restricting imports to a relatively low level. The remainder of the increase in reserves was attributable to the increased earnings of the overseas sterling countries, against which the United Kingdom accumulated heavy new liabilities in the form of sterling balances. The total of these balances held by the rest of the sterling area rose, by the end of 1950, to a level higher than at any time since the end of the war.

7. Payments Relationships in Western Europe

The European Payments Union

The development of the heavy surplus position of the overseas sterling area, discussed in the preceding section, has strongly influenced the evolution of payments relationships among western European countries in recent months and has been one of several factors tending to strain the facilities of the newly established European Payments Union. At the same time, however, the general easing of the dollar problem has helped to provide a more favourable environment for the shift from bilateral to multilateral trade and payments arrangements under the E.P.U. and for the relaxation of trade restrictions among western European countries

The universal dollar shortage after the war had been a serious obstacle to the freer development of trade among European countries and a major reason for the growth of a jungle of bilateral trade and payments arrangements which, while permitting trade to revive under conditions that would otherwise have made it impossible, inevitably confined trade to relatively narrow channels and strengthened autarkic tendencies. The risk was that, if trade controls were relaxed, large deficit and surplus positions would develop, necessitating dollar settlements which deficit countries could not afford or credit extensions greater than surplus countries were prepared to grant. The need to get away from the restrictive effects of the bilateral system and yet obviate or minimize the risk of undue strain on dollar and credit resources gave rise to a series of attempts by western European countries to work out a more flexible but appropriately safeguarded payments system, culminating in the establishment of the European Payments Union in the middle of 1950

One of the main distinguishing features of the E P.U. is that it provides for a genuine multilateralization of settlements, all bilateral surpluses and deficits among the member countries being consolidated each month into a single net credit or debit position between each member and the Union as an entity. It thus differs fundamentally from its predecessor, the Intra-European Payments Scheme, under which the multilateral offsetting of surpluses and deficits arising between each pair of countries was essentially voluntary.[2] In establishing the new system, particular care was taken to guard against the risk

[2] Under the first Payments Scheme, which began in October 1948, the multilateral offsetting of bilateral surpluses and deficits was entirely voluntary, and the second Payments Scheme, which began in September 1949, modified this only to a limited extent The practical difficulty under such voluntary arrangements was that multilateral compensation would serve to concentrate all bilateral positions on the strongest and weakest parties , that is, on bilateral claims by over-all creditor countries on the over-all debtors Under the new E P U , the creditor and debtor positions become " impersonalized " in that each country has only a net surplus or deficit with the Union and not directly with other member countries For a fuller discussion of the experience under the earlier Payments Scheme and of the general principles underlying the European Payments Union, see last year's Survey, pp. 98 to 108.

of early and large dollar settlements. This was accomplished by the establishment of quotas which, in effect, operate as lines of credit from surplus countries in favour of the Union and as lines of credit by the Union to deficit countries, settlements in gold or dollars occurring only after certain proportions of the quotas have been used up. These quotas (which may operate in either direction for a particular country at a particular time according to whether it finds itself in a surplus or a deficit position) were designed to cover seasonal or other temporary disequilibria. They were also intended to provide time for working out more basic adjustments where necessary and, for this purpose, the Union has as one of its most important innovations a management board with considerable power to review and influence not only the external but also the internal policies of member countries. In addition, an attempt was made to take account of more chronic disequilibria by the establishment of so-called "initial positions": thus, several countries granted drawing rights (as a counterpart to a portion of their E.R.P. aid) to cover their expected surpluses with the Union, $150 million being provided by the United Kingdom alone, while other countries were granted drawing rights on the Union to cover their expected deficits.[1]

An indication of the greater disequilibrium arising in trade and other transactions among western European countries since the beginning of the Korean war is given in Table 60: during the nine-month period July 1950 to March 1951, the sum total of monthly bilateral deficits under E.P.U. was $2,340 million, compared with $4,025 million over the twenty-one preceding months under the old Payments Schemes. Moreover, $1 billion of these deficits under E.P.U. could not be offset, despite the automatic and compulsory character of multilateral compensation, and had to be covered by drawings on credits and initial positions and by gold settlements. This, however, was much better than the results under the

[1] See Table 61 for these initial debit or credit positions and also for the quotas set for each member. (These and other operations are conducted in terms of "units of account", but the unit is, in fact, equivalent to the United States dollar.) The "initial positions" are comparable with the "drawing rights" under the earlier Payments Scheme, except that the latter rights were established bilaterally and represented a maze of advance estimates of bilateral balances which, in practice, could not be foreseen with a reasonable degree of accuracy with respect either to size or to direction

Table 60

THE COMPENSATION AND FINANCING OF BILATERAL DEFICITS IN TRANSACTIONS AMONG WESTERN EUROPEAN COUNTRIES

Millions of dollars and percentages

Transactions	21-month period under Intra-European Payments Scheme *(October 1948 - June 1950)*				9-month period under European Payments Union *(July 1950 - March 1951)*	
	Actual operations under I E P.S.	*Per cent*	Hypothetical results if E P U had been operative	*Per cent*	Actual operations	*Per cent*
Total of all monthly bilateral deficits	4,025	*100*	4,025	*100*	2,340	*100*
Means of covering:						
I. Compensation operations	*910*	*22*	*2,913*	*72*	*1,330*	*58*
of which:						
Bilateral compensation through time	825 [a]	*20*	1,725	*43*	660	*28*
Multilateral compensation	85	*2*	1,188	*29*	670	*30*
II. Financing through drawing rights and credits	*3,115*	*78*	*1,112*	*28*	*1,010*	*42*
of which:						
Drawing rights (I E P S) or initial positions (E.P.U)	1,280	*32*		..	265	*11*
Bilateral credits (I E P.S) or use of quotas (E P.U.)	1,580	*40*		.	525	*22*
III. Gold settlements	255	*6*	.		220	*9*

Sources Information supplied by the Organization for European Economic Co-operation.

[a] Compensations executed outside the Payments Scheme under bilateral payments agreements. For fuller explanation, see accompanying text

old Payments Scheme, where the amount of multilateral compensation proved to be negligible, and even straight bilateral compensation was less than half as much as it could have been had the system provided for carrying forward and cumulating the bilateral deficits.[1] This had left more than $3 billion to be financed by drawing rights and bilateral credits, whereas, had the E.P.U. then been in effect, the amount of such financing required would have been only one-third as great.

Creditor and Debtor Positions

Gold settlements within E.P.U. have so far been relatively small because of the financing provided through quotas and initial positions and also because of a special credit arranged for western Germany, discussed below. The means of financing initially provided have been progressively exhausted, however, and, if the debtor and creditor positions already built up are further accentuated, gold settlements will be increasingly necessary. The evolution of these positions, together with the means of settlement employed, is shown in Table 61, covering the first nine months of operations from July 1950 to March 1951. The operations of the Union during this period have been largely dominated by the growing surplus of the United Kingdom, or rather that of the sterling area as a whole,[2] and the growing deficit of western Germany. Both these positions have accumulated fairly rapidly and consistently month by month since the beginning of E.P.U., although the accounts for the latest month, March 1951, showed a heavy fall in the rate of growth of the British surplus, while the position of western Germany, in that one month, shifted for the first time to a small surplus.[3]

The cumulative British surplus of $549 million[4] was at first financed through drawings on the initial position granted by the United Kingdom and, after this was exhausted, by the use of the United Kingdom's quota ; the point where partial settlements in gold to the United Kingdom began to be necessary was reached in November. The cumulative western German deficit of $446 million was financed at first by the building up of a large debit position within its quota, then in part by gold settlements when these became necessary, and finally by a special credit of $120 million granted by the Union in November in the hope of tiding over the German payments crisis.

Next to the United Kingdom, France has had the largest surplus, primarily for reasons which have been explained in the analysis of its trade position —that is, the weakness of its home demand during most of the period, which made for low imports and at the same time released goods for export in response to rising demand in other countries. This brought a rapid build-up of the French credit position to a point where substantial gold settlements in favour of France have been required. Belgium has shown a rather similar development, although on a smaller scale until recently, and the use of the Belgian quota has not quite reached the point where gold settlements are necessary. Portugal, the fourth largest creditor, has had a surplus throughout the period and, like the United Kingdom and France, has already begun to receive gold settlements.[5]

Among the debtor countries, the Netherlands has had a persistent deficit throughout the first nine months of E.P.U. and accumulated the largest debit position next to that of western Germany. It has had to make gold settlements, although this was made easier by the improvement in its balance of payments with the dollar area and the rise in its gold and dollar reserves during 1950. The Netherlands deficit is partly a reflection of the import restrictions

[1] Under the Intra-European Payments Scheme, bilateral positions were not cumulated from month to month, but were settled, as far as possible, at the end of each month with the aid of drawing rights. If the accounts had been cumulative through time, a much larger amount could have been cancelled out, since in many instances bilateral balances shifted first in one direction and then in the other. As the Scheme worked, the use of drawing rights served to wipe out some of the possibilities of compensation otherwise arising, in the course of time, through the ordinary functioning of the bilateral payments agreements.

[2] On the basis of data given in *United Kingdom Balance of Payments, 1946 to 1950 (No 2)*, Cmd 8201, the cumulative credit position of $433 million for the period July-December 1950 was accounted for to the extent of $185 million by the United Kingdom's own current account surplus with the E P.U. area (including, however, re-exports) and to the extent of $196 million by the surplus of the rest of the sterling area, the remainder representing the net effect of capital transactions and other transfers.

[3] In the April settlement of the E P.U , western Germany had a further surplus of over $40 million

[4] In addition, the United Kingdom repaid, during the nine-month period, some $130 million (gross) of sterling balances to O.E.E.C. countries, thus tending to reduce its credit position in E P U.

[5] Switzerland also shows a cumulative surplus, although small in relation to its quota Voluntary gold settlements which Switzerland had made against its deficit for the month of November were regained in December and January as it shifted to a surplus.

Table 61

DEVELOPMENT OF CLEARING BALANCES IN THE EUROPEAN PAYMENTS UNION

Millions of units of account [a]

Country	Initial credit (+) or debit (−) position	Quota	1950				1951			Cumulative [b] credit (+) or debit (−) position July 1950-March 1951	Means of financing, July 1950-March 1951		
			July-September (cumulative)	October	November	December	January	February	March		Amount of initial debit (+) or credit (−) used	Use of quota credit granted (+) or received (−)	Gold received (+) or paid (−)
Austria	+ 80 0	70	− 8.0	− 2 7	− 7 5	−19 2	−14 9	−19 8	−10 5	− 82.6	− 80 0	—	—[c]
Belgium-Luxembourg	− 44 1	360	—	—	+ 7 8	+14 0	+26.5	+33.2	+23 9	+105 3	+ 44 1	+ 61 2	—
Denmark	—	195	− 15 6	− 13 0	− 5 6	− 4 2	+ 9 2	+ 3 6	−13 6	− 39 1	—	− 39.1	—
France	—	520	+185 6	− 23 9	+22.6	+28 0	+20 2	+12 2	+26 0	+270.8	—	+187.4	+ 83.4
Germany western zones	—	320	−173 4	−161 1	−34 7	−32 5	−42 1	−58 3	+11 3	−445 8	—	−192.0 − 80 1 [d]	−128.0 − 45.6 [d]
Greece	+115 0	45	− 41 5	− 11 8	−11 3	− 6 2	− 9 4	− 7 4	− 5 0	− 92 6	− 92 6	—	—
Iceland	+ 4 0	15	− 1 9	+ 0.3	− 1 5	− 0 2	− 0 2	− 0 2	− 0 2	− 3 9	− 3 9	—	—
Italy	—	205	+ 2 4	− 19 5	—	·13 8	− 3 2	− 6.9	—	− 41 0	—	− 41.0	—
Netherlands	+ 30 0	330	− 41 5	− 31 2	−23 1	−12 1	−23 0	−25 0	−37.0	−192 9	− 30.0	−118 8	− 44.1 [e]
Norway	+ 60 0 [f]	200	− 10 6	− 14 7	−11 9	−13 9	− 8.8	− 3 5	−10 4	− 73.8	− 60.0	− 13 8	—
Portugal	—	70	+ 17 7	+ 4.6	+ 7 2	+ 7.4	+ 9.6	+12 2	+ 5 0	+ 63 4	—	+ 38.7	+ 24.7
Sweden	− 21.2	260	+ 5 6	+ 8.2	−13 8	—	−18.9	−23 5	+12 2	− 30 3	—	− 30 3	—
Switzerland	—	250	—	—	−27 3	+14 7	+23 1	+10 8	+ 5 2	+ 26 5	—	+ 26 5	—
Turkey	+ 25 0 [g]	50	+ 1 4	+ 9 2	+ 2 2	− 7 5	− 0 4	− 1 2	−16 3	− 12 7	—	− 12.2	− 0.5
Sterling area (excl Iceland)	−150 0	1,060	+ 79 7	+210 9	+96 6	+45 6	+32 4	+73 8	+ 9 6	+548 8	+150 0	+305 4	+ 93.4

Sources Various documents published by the Organization for European Economic Co-operation

[a] Equivalent to 1 United States dollar

[b] Differences between these figures and the sum of monthly figures are due to rounding

[c] An amount of 2 6 million units of account by which Austria's cumulative net deficit exceeded its initial credit balance of 80 million was fully settled in dollars in accordance with Article 13 (a) of the Agreement

[d] Settlements under special credit arrangement for Germany covering amount by which its cumulative accounting deficit exceeded its quota

[e] Including 18 5 million units of account paid under Article 11 (1) of the Agreement

[f] Of which 50 million units of account as a grant and 10 million as a loan

[g] As a loan from E P U

imposed by western Germany to remedy its own payments difficulties, but it is also an outgrowth of the deterioration in the Dutch terms of trade. The same factors have contributed to Denmark's deficit with E.P.U., which also has reached the point where gold payments become operative. Italy has used its quota to a point where gold settlements will become necessary, despite its surplus on trade account with the E.P.U. area ;[1] the deficit in the clearing balance has been explained by the need, under the changed economic conditions since the outbreak of the Korean war, to make advance payments for many of the essential goods imported.[2] Austria and Greece, two chronic deficit countries to which initial credit positions were granted, have had substantial deficits, and the former has had to make small dollar settlements.[3] Sweden has shown a development contrary to that foreseen when it was assigned an initial debit position in the Union, having a small cumulative deficit instead of a surplus. This is attributable to a sharp increase in imports following liberalization and to a high level of domestic activity.

The development of debit and credit positions in E.P.U. is thus beginning to show signs of stress and strain as the initial financing facilities are used up and various deficit countries find it necessary to make gold settlements. The further development of the position of the smaller members will be strongly influenced by future changes in the position of western Germany and the United Kingdom : elimination of the western German deficit would necessarily increase the pressure on its trading partners, some of whom are already in a debit position in the Union, whereas a decrease in the British surplus would work in the opposite direction.

The greater part of western Germany's deficit in its clearing balance with E.P.U. can be explained by the sharp increase in its deficit on merchandise trade with other countries in the system, which reached a monthly peak of $77 million in October 1950. The rise in the trade deficit was partly the result of the great expansion in western Germany's food imports from neighbouring countries following liberalization and partly the result of the usual time lag between imports of raw materials and exports of finished manufactures, which alone would produce a payments gap in a period of rapidly rising trade. This tendency was accentuated by the severe deterioration in western Germany's terms of trade and by the rush of importers to buy raw materials after the outbreak of the war in Korea, reversing the tendency in the second quarter when imports had been held down by expectations of price declines. Rumours about the possible revaluation of the pound sterling also seem to have contributed to the spurt in imports. After some improvement in the trade position in November and December, when the rush for raw materials and talk of sterling revaluation died down, the trade deficit increased again in January and February 1951 : internal expansion appears to have held back the export expansion, while the very expectation that imports would not be allowed to remain on the existing scale did, in itself, serve to maintain import demand. The concentration of western Germany's trade deficit in the E.P.U. area was due to its vigorous efforts to divert imports away from dollar to non-dollar sources,[4] and its demand for raw materials caused the greater part of the increase in the deficit to be in trade with overseas sterling countries.

The trade deficit, as derived from western Germany's import statistics, accounts, however, for only part of the deterioration in its clearing balance with E.P.U. As seen in Charts 6 A and 6 B, the deficit on trade account with E.P.U. and the total clearing balance with E P.U. have both followed the same broad movements, but nevertheless with considerable divergences.[5] In the second quarter of 1950, a decrease in the trade deficit had been accompanied by a much greater improvement in the clearing balance. This seems to have been for a rather special reason : in order to use up drawing rights which had been granted

[1] Italy may not need to make gold payments if it is able to settle further deficits from its existing sterling resources. Italian sterling balances are estimated to have been $210 million at the end of 1949. See *The Banker*, London, May 1950.

[2] Ministro del Tesoro, " Relazione Generale sulla Situazione Economica ", March 1951.

[3] The payment by Austria followed the exhaustion of its initial credit position and was required under the rule that members receiving an initial credit position greater than their E.P.U. quota should not be able to use that quota during the period for which the initial position was established.

[4] Whereas in 1949 western Germany obtained 37 per cent of its total imports from North America and 45 per cent from E P.U. countries (including the overseas sterling area), the corresponding shares in 1950 were 16 and 77 per cent respectively

[5] The difference in the movements can be only partly explained by the deficit on service transactions, which is estimated to have increased by about $20 million from the first half of 1950 to the second half.

Chart 6 A

WESTERN GERMANY'S TRADE WITH THE E.P.U. AREA

Millions of dollars in current prices, imports c.i.f., exports f.o.b.

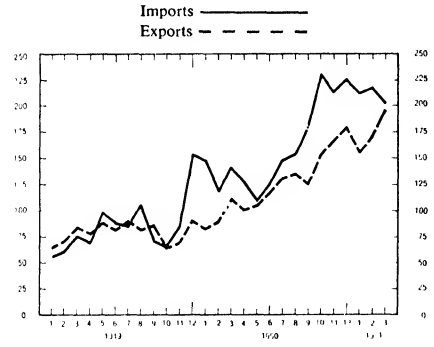
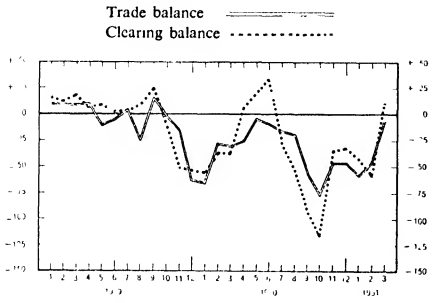


Chart 6 B

WESTERN GERMANY'S TRADE AND CLEARING BALANCES WITH THE E.P.U. AREA

Millions of dollars



Sources Trade data are from statistics of the external trade of the western zones of Germany Clearing balance is from published reports on E P U operations

NOTE — The import figures for January to December 1949 and for March 1951 refer to countries of origin, those for other months to countries of purchase Trade balance has been computed with imports aken c i f

by western Germany under the earlier Payments Scheme, other countries were willing to make advance payments for German goods and to grant credits for deliveries to Germany. After July the situation was reversed ; part of the German exports moving out at that time had already been paid for and brought in no new money. Moreover, the rumours about sterling revaluation made importers anxious to settle in advance for imports from the sterling area, while exporters were glad to defer collections in the hope of earning a windfall exchange profit, these speculative tendencies in payments thus accentuating the gap evident in the recorded trade figures. Finally, the German export expansion was accompanied by some extensions of credit for long-term deliveries of machinery and equipment, and some of the discrepancy may also be accounted for by flight of capital.

In brief, western Germany's experience during the past year shows the incompatibility between the premature dropping of selective controls over imports and the internal expansion required to absorb idle resources of men and machines. It could be foreseen that western Germany's attempt to conduct its foreign trade as if it had already reached full employment at home and were solvent abroad was likely to lead to difficulty and would leave it vulnerable to speculative forces or other adverse developments such as the sharp deterioration in its terms of trade. One of the anomalies of the situation is that western Germany, while still heavily dependent on E.R.P. aid from the United States and over-drawing on its credit facilities in E P.U , raised its food consumption to a level comparable with that of the United Kingdom and, almost alone among European countries, succeeded in some stocking up of raw materials after Korea, whereas the creditor countries in E P.U., particularly the United Kingdom, strengthened their external financial positions at the expense of their imports.

Western Germany's difficulties in E.P.U , however, may well prove to be only the temporary result of freeing its imports too soon and too fast, particularly in relation to its limited exchange reserves and credit facilities.[1] As in so many other problems, it is a question of margins, and the balance could swing in either direction with only relatively small changes in imports or exports. Fundamentally, western Germany's position in E.P.U. should be strong in view of the slack still remaining in its production and export capacity at a time when foreign demand works in its favour, although the increased cost of its raw material imports leaves the outlook uncertain. Much depends upon whether or not chief emphasis

[1] The establishment of quotas in E P U on the basis of each member's trade turnover with the area in 1949 served to limit the credit facilities available to western Germany in relation to its greatly expanded trade in 1950.

is given to the further expansion of production and exports or, as seems to be the tendency, to the curtailment of imports ; and, if the latter, whether import cuts can be distributed in such a way as to avoid unduly damaging the exports of neighbouring countries while still assuring continuity of raw materials supplies.[1]

For the near future, the most difficult problem in E.P.U. may prove to be not so much the western German debit position as the credit position of the sterling area. While the slowing down in the rate of growth of this position in March may point to some easing of the problem, it seems more likely that sterling area raw materials will continue to be avidly sought after by western European countries, tending, at prevailing high prices, further to accentuate the British surplus. This may be countered in some measure by a diversion of the United Kingdom's own exports away from Continental European markets to overseas sterling area markets. Unless, however, European exports to the United Kingdom and other sterling countries expand rapidly, new financing difficulties are likely to arise as the necessity for gold settlements with the Union increases.[2]

8. Prospective Changes in Trade and Payments

The effects of the great changes in world demand and prices which occurred in the course of 1950 will be more fully felt in 1951. One clearly forseeeable result is that the rise in raw-material prices since Korea will weigh heavily in the overseas payments of European countries. While there may be further price changes in either direction, the level of import prices prevailing at the beginning of 1951 should provide a rough indication of the effects on the cost of overseas imports. A comparison of import unit values of raw materials in January and February of 1951 with the corresponding averages for 1950 shows a rise of about 40 per cent.[3] Prices of food and feeding stuffs imported from overseas had increased very much less —by about 10 per cent—but it is doubtful whether the full effects of inflationary developments overseas had yet been felt. Since raw materials and foodstuffs accounted for more or less equal parts of Europe's overseas imports in 1950 and imports of manufactures were relatively minor, these price changes would raise the cost of the 1950 volume of imports by approximately 25 per cent. In terms of dollars, Europe as a whole would have to pay about $3 billion more to obtain the same amount of goods. The total import bills of individual European countries will increase still more as a result of the rise—presumably much smaller but nevertheless substantial—in prices of commodities of European origin.

The possibilities of financing such an increase in the cost of imports vary greatly from country to country. The United Kingdom in particular is in a special situation. Its exports increased in 1950 much more moderately than those of most other European countries, and the beginning of 1951 has even seen a decline in the British export volume, which is now running at a level roughly corresponding to the average of 1950.[4] In view of shortages of raw materials and the great claims of the British armaments programme, the volume of exports seems more likely to decline further than to stage a renewed rise during 1951. An increase of at least $1 billion in the United Kingdom's trade deficit appears to be in prospect if the 1950 volume of imports is maintained and both import and export prices remain at the levels reached in the first quarter of 1951. Some increase in net earnings from service transactions is expected,[5] but

[1] While over-all limits have been indicated for the future level of imports, nothing is yet known about their commodity composition, except that O.E.E.C. authorities have urged that, as far as possible, reductions in imports should not be made at the expense of members whose own position in E.P.U. is weak.

[2] Sterling balances held by the O.E.E.C. countries and amounting to slightly over $1.1 billion at the end of 1950 may diminish the need for gold settlements for some countries, but their use in settling deficits with the Union depends on the concurrence of the United Kingdom. Moreover, these balances seem to be concentrated in rather few countries, with the three largest holders—Portugal, Italy and France—apparently accounting for about one-half of the total.

[3] This calculation is based on import unit values of the United Kingdom and western Germany, weighted according to the commodity composition of Europe's overseas imports in 1950. The unit values for January and February 1951 would roughly correspond to the end-of-year prices used as the basis for similar estimates in Chapter I with respect to the prospective increase in the receipts of primary producing countries from exports to Europe and North America.

[4] The recent decline in the export volume appears to be concentrated on raw materials and unmanufactured articles. It is hardly likely that the export availabilities in this group —with the possible exception of coal—will increase significantly during the year.

[5] The British Government estimates that net earnings from service transactions will rise by about $200 million in 1951. This estimate takes into account the interest payments for United States and Canadian loans of 1946, which alone will mean a burden of over $100 million.

not enough to prevent a shift of the current account balance from a surplus to a deficit, unless there is a further rise in British export prices.

Most other European countries are likely to be more favourably situated than the United Kingdom to offset the increased cost of their imports through a rise in exports. In general, the volume and still more the value of their exports at the beginning of 1951 were running at a level considerably above the 1950 average and, in some cases, may go higher still, since a number of these countries have had unused productive capacity and their armaments programmes are smaller and more slowly developing. Sweden, Belgium, Switzerland and a few other countries may be able either to improve their trade balances or to increase their imports. On the other hand, a number of other countries—western Germany, the Netherlands, Denmark, Norway, Greece and Austria—have had relatively large over-all deficits, some of them being chronically dependent on outside financial assistance. A general rise in the level of prices alone tends to increase the size of these deficits, in money terms, particularly when the rise in export prices is very moderate compared with that in import prices.

It is thus seen that, while the payments positions of some countries are likely to improve, old strains will tend to persist or even become accentuated, as in the case of western European countries which already had large deficits, and new strains may arise, as in the case of the United Kingdom. The severity of these strains and the nature of the adjustments which they may impose depend largely on the still uncertain factor of outside financial aid. The assistance received from the United States under the European Recovery Programme has been progessively reduced, as foreseen at the beginning of the programme, and in the case of the United Kingdom and Ireland has been suspended. On the other hand, the whole programme of American aid to western European countries is in the process of reconsideration and adaptation to their defence efforts, and it is still not known to what extent that aid will serve to relieve economic strains. There is also some uncertainty regarding the extent to which two other principal sources of financing will be available in the future. One of these is the European Payments Union, where the progressive exhaustion of credit facilities by deficit countries in western European trade presents problems of readjustment or new financing to which answers remain to be found.[1] The other is the financing extended to the United Kingdom by overseas members of the sterling area through the increase of $1.1 billion in their sterling balances during 1950. While the functioning of the sterling area system tends to make changes in these balances more or less automatic in response to changes in other transactions, continuation of such a heavily unbalanced pattern must impose increasing difficulties on overseas countries already subjected to heavy inflationary pressure. It must therefore be expected that overseas sterling countries, as well as other primary producing countries whose trade surpluses with Europe are mounting, will increasingly endeavour to obtain goods rather than additions to their reserves or monetary claims in exchange for their own exports.

The balance-of-payments strains experienced by European countries as a result of the increased cost of imports and possible reductions in the amount of outside financial aid received will become smaller, of course, if there is a further substantial rise in their export prices. It is possible that some raw-material prices will continue to ease or level off and that further price increases will be chiefly in manufactures, which are only now beginning to reflect the higher costs of materials. The very existence of a large and incompletely satisfied demand in overseas markets will tend to drive up European export prices still more. While a continued rise in their export prices may serve to diminish the difficulties experienced by European countries in their overseas payments relationships, such an improvement would be achieved only at the expense of aggravating another and even more menacing problem—that of growing inflation in Europe and in the world generally.

[1] A revision of country quotas within the European Payments Union is expected to be made during the summer of 1951 and may help to relieve some of the more critical payments positions.

Chapter 5

THE PROBLEM OF INFLATION

1. INTRODUCTION

The Upward Movement of Prices

Virtually every European country is experiencing inflation and the threat of further inflation. Generally speaking, the problem is most serious in countries which are heavily dependent on international trade and hence susceptible to price influences from the outside. This is the position of most western European countries, which rely predominantly on external sources for their raw materials and whose total imports are, in some cases, as much as 40 per cent [1] of their national incomes.

The clearest indication of the inflationary dangers in western Europe is given by the recent and continuing swift rise in prices, as shown in Table 62 and Chart 7. Following a period of relative stability from the end of 1948 to September 1949—which, as will be seen, was more precarious in some countries than the figures would suggest—import and wholesale prices began a substantial rise in countries which had devalued, the increase being, in most cases, around 1½ per cent per month or a total of 15 to 20 per cent by September 1950. Retail prices and the cost of living showed the usual lag, but nevertheless also began to rise. Since September 1950, the upward movement of prices has increased in violence and scope : the typical rate of increase up to early 1951 has been from 2 to 4 per cent per month for import and wholesale prices and from 1 to 2 per cent per month for the cost of living. Even countries where the cost of living had previously been fairly stable, as in Sweden and the United Kingdom, or actually falling, as in western Germany and Switzerland, have not escaped the post-Korean infection.

[1] *Percentage of Imports to Net National Income at Market Prices in 1950*

Netherlands, Norway, Ireland	40-45	Austria, Finland	15-20
Belgium, Denmark, Switzerland	25-35	France, W. Germany, Italy	10-15
Sweden, United Kingdom	20-25	Czechoslovakia, Greece, Turkey	10

Table 63

MOVEMENTS IN TEXTILE PRICES

Percentage increase in index numbers September 1949 to February 1951

Country	Import prices of raw materials	Wholesale Prices: Raw materials	Wholesale Prices: Finished manufactures	Retail prices for clothing
Belgium	166	130	63	16
France	102	162	97	13
Germany .				
U.K./U.S. Zone	113	85 *a*	12 *a*	1
Italy . .	66 *b*	43	44	17
Netherlands .	144	118	62	40
Sweden .	106	81	45	12
United Kingdom	190	115		8

Sources and methods see Appendix B
a Third quarter 1949 to December 1950
b September 1949 to January 1951

The original cause of this recent wave of price increases was, of course, the rise in world demand that followed the outbreak of fighting in Korea. This took the form of a rush by Governments and traders to acquire materials that might become scarce in the event of a large-scale war. But some were quicker off the mark than others, and what was, from a world point of view, an inflation of demand first appeared in Europe mainly as an inflation of external costs. The steep rise in import costs made readjustments of selling prices inevitable, even had there not followed later the prospect of great increases of internal demand through the decision of European Governments to spend vastly more than hitherto on armaments. The vertical transmission of higher import costs to the prices paid for finished manufactures by consumers is by no means complete yet, as Table 63 shows for the particular case of clothing; for this reason alone, further rises in retail prices are to be expected, in some cases greater than those which have already occurred.

Table 62

PRICE MOVEMENTS FROM 1949 TO 1951

Country	Monthly Averages of Percentage Increases									Percentage Increases from Sept. 1949 to Feb. 1951		
	Unit values of imports			Wholesale prices			Cost of living			Unit values of imports	Wholesale prices	Cost of living
	Dec. 1948–Sept 1949	Sept 1949–Sept 1950	Sept. 1950–Feb 1951	Dec. 1948–Sept. 1949	Sept 1949–Sept 1950	Sept 1950–Feb 1951	Dec. 1948–Sept 1949	Sept 1949–Sept 1950	Sept. 1950–Feb 1951			
Austria	−0 4	5 9	3.0	1.9	2 5	3 2	2 1	0.4	2.8	97	51	20
Finland	1.4 [a]	2.2 [a]	3.4 [a]	0 2	1.5	4.7	0 2	1.3	2 0	39 [a b]	46	27
France	0.0	1.1	3.9	−0 1	1 2	3.3	0.4	1 1	1.4	39 [c]	33	21
Greece	.	..	..	0.5	0 4	3.4	0 8	0 8	1 6	.	22	18
Spain	.	.	.	0.5	1 9	3.9	0 4	0.9	1 7	..	47	21
Denmark	−0.7	1.4	1.0	−0.3	1 4	3.4	−0.1	0.7	1.2	24 [c]	37	16 [d]
Ireland	−0.9	1.6	1.5	−0 1	0 6	2.1	0 1	0 0	0.7	24 [b]	18	2 [e]
Netherlands	−1.1	1 6	2.1	−0 1	1 4	3.2	0 1	1 1	0.7	29 [f]	35	17
Norway	−0 7	1.7	1.7	0.2	1 7	1.8	0 2	0 7	1.0	28 [f]	31	13
Sweden	−1.0	1 3	2.6	0 0	0 5	4.0	0 1	0 1	2 0	33 [c]	27	13 [g]
United Kingdom	−0 4	1.4	3 8	0 5	1 5	2.4	0.3	0.1	0 7	44 [h]	32	5
Belgium	−1.0	0.6	3.3	−0 9	1 3	2.6	−0 4	0 2	0.4	23	30	5
Germany :												
U.K./U.S. Zone	1 3	0.9 [i]	2.3 [i]	−0 6 [j]	0 2 [j]	3 0 [j]	−0 9	−0.4	1.1	24 [i]	16 [j]	0.6
Italy	−0.5	−0 5	4.4	−1 5	0 3	2 8	−0 1	0.2	0.7	15	17	6
Portugal	..	.		−0 1	−0.3	2.2	0 2	−0 3	0.8	..	7	—
Switzerland	−0 8	−0.2	1.2	−0.7	0 2	2 0	−0 1	−0.1	0.4	3	13	1
Turkey	−0.5	−1 3	−2 5	0 0	−1.0	3.0	0.7	−0.8	1.0	−22 [b]	− 2 [f]	− 6 [f]

Sources see Appendix B

Note — Figures shown in the first nine columns of this table are monthly arithmetic averages of percentage increases in the respective price indices over the periods shown They are obtained by dividing the percentage increases of the indices over the three successive periods—December 1948 to September 1949, September 1949 to September 1950, September 1950 to February 1951—by the numbers of months contained in the periods ; *i e*, respectively 9, 12 and 5

The available data do not always permit the figures to correspond exactly to the column headings However, the percentages have been calculated for periods approximating as nearly as possible those shown in the table Where only quarterly data were available, the quarterly average has been taken to refer to the middle month of the quarter

[a] Index of import prices.

[b] September 1949 to December 1950.

[c] Third quarter 1949 to first quarter 1951

[d] October 1949 to April 1951

[e] August 1949 to November 1950

[f] September 1949 to January 1951

[g] September 1949 to March 1951

[h] Third quarter 1949 to February 1951

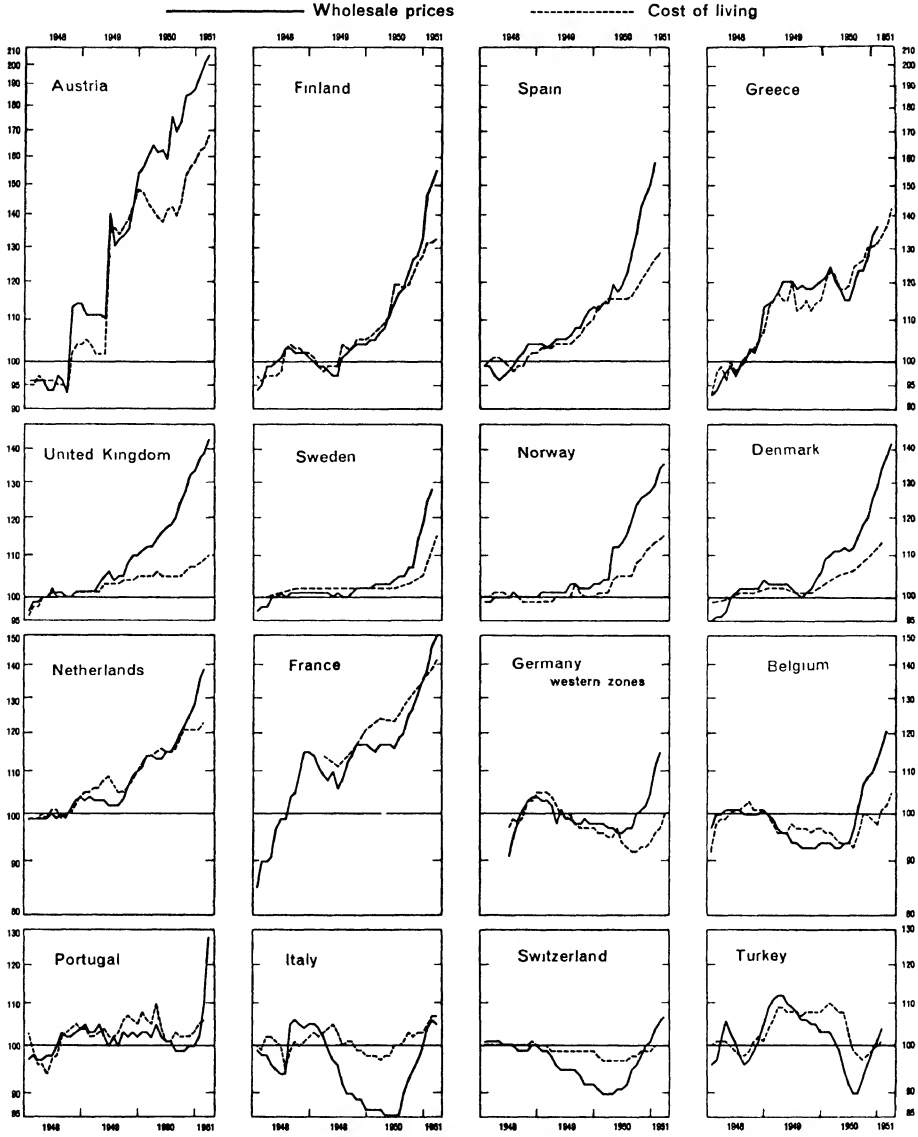
[i] Three western zones

[j] Index of producers' prices for industrial products.

Chart 7

INDEX NUMBERS OF WHOLESALE PRICES AND THE COST OF LIVING

Logarithmic scale



The rise in European defence expenditure is still largely in the future, but the shadow of Europe's increased defence bill has marched before it. Increasingly since the autumn of 1950, Governments, merchants, manufacturers and consumers in Europe, as in overseas countries, have done their best to hoard durable goods and materials which were expected to become scarce or to rise in price. This speculative demand has been an important factor in further driving up prices that were already rising and in transmitting price increases horizontally to goods not directly affected by cost increases. There is little reason to believe that, in many countries, this horizontal movement of price rises has more than started yet.[1]

A further inflation of costs not yet passed on to consumer prices has resulted from rises in the incomes of wage-earners, demanded and granted as an offset to rises in the prices charged by others, and often accompanied by adjustments in prices paid to farmers. Countries such as Norway, Sweden and the United Kingdom, which had previously been relatively successful in holding domestic cost-inflation in check, have in the last few months seen an inflation of wage-rates in general more rapid than any they have experienced since the war.[2] In general, as long as profits and the prices of consumers' goods continue to rise, further increases in wages and thus in costs must be expected.

The upsurge of domestic prices and incomes has thus by no means lost its momentum : even should the more extreme raw material prices continue to weaken and primary prices in general level off, the upward movement in European countries must be expected to continue, and increases in one country necessarily reinforce increases in others in a trading community as active as that in western Europe.

[1] This horizontal spread to the home market of increases in external prices may be quite important. For instance, in Sweden, the higher costs of packing materials due to the transmission to the home market of higher export prices for wood and paper have, in spite of the damping effect of export duties, raised the food component of the cost-of-living index by 2 per cent. See *Konjunkturläget våren 1951*, Meddelanden från Konjunkturinstitutet, A.19, Stockholm, p. 72.

[2] See Table 64. The figures given in this table show wage increases up to the end of 1950. In the first months of 1951 particularly heavy wage increases occurred in several countries ; in Sweden, they amounted to some 15 per cent on the average.

Table 64

HOURLY EARNINGS IN INDUSTRY

Country	Percentage increase	
	Dec. 1948-Dec. 1949	Dec. 1949-Dec. 1950
Austria	16 *a*	19 *b*
Finland *c*	4	32 *d*
France	4	20
Denmark *c*	3	6 *d*
Netherlands *e*	—	10
Norway *c*	4	10 *d*
Sweden *f*	3	5
United Kingdom *g*	3	4
Belgium	3	8
Germany · U K./U.S. Zone	8	10 *d*
Italy	4	4 *d*
Switzerland *e*	—	—

Sources and methods see Appendix B
a March 1949 to December 1949
b December 1949 to November 1950
c Percentage increase between quarters ending in quoted months
d Provisional
e Hourly rates
f November to November
g October to October

The Additional Claims on Resources

For most (though not all) countries, the present inflationary tide comes at a time when the volume of resources available for consumption and investment can be expected to rise only moderately or even to decline in some instances. Strong inflationary tendencies may, of course, arise even with an expanding volume of resources available, as recent experience in Sweden shows, but the problem of combating inflation is far more difficult if consumption or investment, or both, have to be reduced in the face of buoyant wages and profits, fuller employment, and rising money costs.

While the actual increase in armaments expenditure in 1950 was moderate, the adverse development in the terms of trade made itself felt increasingly during that year. In Table 65, the changes from 1949 to 1950 in the volume of output, in real income, and in the volume of resources available for home use are estimated for a number of European countries. Although the margin of error involved in these calculations is appreciable, the figures serve to indicate the broad orders of magnitude. With the exception of France (where the improvement in production for the year

as a whole was small) and of western Germany (where it was extraordinarily large), the aggregate output of the countries considered rose by about 5 to 8 per cent. The terms of trade, on the other hand, deteriorated, in most cases by 8 to 12 per cent. As a result, the improvement in real national income was considerably smaller than that in output, amounting to 2 to 5 per cent in most cases. It is further seen that, for most of the countries considered, the volume of exports increased relatively to that of imports. In some countries, among them Norway and the United Kingdom, the balance of payments even improved in spite of an adverse movement of the terms of trade, with the result that the volume of resources available for home use hardly increased at all. In other countries, notably Denmark,[1] Sweden and the Netherlands, the supply of resources for domestic use increased at about the same rate as total output, because the effects of the worsening of the terms of trade were offset by a deterioration in the balance of payments.

Although, by and large, 1950 was not a bad year for consumption and investment in Europe, the data shown in Table 65, and other information available, indicate that a number of important countries are not well placed to carry the additional claims of rearmament. In the United Kingdom, consumption rose by 3 per cent,[2] but this was partly achieved at the expense of running down stocks of imported materials, which now have to be built up. Personal consumption and capital formation also barely increased in France and Norway, although productive resources in the French economy were by no means fully utilized, as has been seen in Chapter 2. Moreover, the greater utilization of capacity not only in France, but also in western Germany and Italy—the principal reservoirs of unused resources in Europe—may be difficult to achieve without itself giving rise to inflationary consequences, as will be discussed in section 3 below.

[1] In Denmark, the volume of resources available for home use increased more than real output in spite of the fact that the volume of commodity exports increased slightly more than imports. This is partly because Denmark had a trade deficit in 1949 which was large, so that a given percentage increase in imports at constant prices would have required a substantially greater percentage increase in exports at constant prices if an increase in the difference between them was to be avoided. In fact, the balance of trade deteriorated by about 100 million kroner at 1949 prices. Similarly, the balance of trade of the Netherlands deteriorated by about 300 million guldens in 1949 prices although the volume of exports increased by 4 per cent more than that of imports.

[2] This represented a marked improvement on the increments obtained in the post-war years after 1947 and brought about a definite improvement in the average standard of living. However, coming after a long period of "austerity", it may be more difficult to halt or reverse the increase than if the new improved level of consumption had never been reached.

Table 65

EXPENDITURE AND OUTPUT IN 1950

Index numbers of volume — 1949 = 100

	Austria	Denmark	Finland	France	Germany: western zones	Ireland	Netherlands	Norway	Sweden	United Kingdom
Personal consumption	106	107	111 [a]	101	113	106 [a]	100	101 [a]	106	103
Government consumption	104	103	.	.	106	106	108	100	107	97
Capital formation at home	94	121	101	100	114	112 [b]	129	98 [b]	103	98
Resources used at home	103	110	108	102	112	107	106	100	105	101
Commodity exports	149	129	102 [c]	135	209	113	137	132	126	116
Commodity imports	100 [d]	127	106	107	128	110	132	104	126	100
Real output	107	108	105	102	113	107	108	105	105	105
Terms of trade [e]	*88*	*91*	*88*	*93*	*88*	*94*	*92*	*92*	*95*	*93*
Real income	104	105	103	101	109	103	103	100	104	103

Sources see Appendix B.

NOTE — The change in real income is defined as the change in real output adjusted for the net loss (or gain) attributable to the change in the terms of trade.

The figures given for total real output do not in all cases correspond exactly to the result of a properly weighted addition of the indices of resources used at home and of imports and exports. The reasons for this are partly statistical deficiencies—*inter alia*, in the deflation factors used—and partly the fact that the figures for imports and exports (as well as those for the terms of trade) refer to commodity trade only.

a Includes changes in business inventories.

b Excludes changes in business inventories.

c Includes estimates for changes in reparation payments.

d Excluding imports under E R P. Total volume of commodity imports, including E R P, was somewhat lower in 1950 than in 1949.

e Contrary to the definition used elsewhere in this SURVEY, the terms of trade have here been taken as the ratio of export unit values to import unit values, i e a figure below 100 indicates a deterioration in the terms of trade.

Table

GOVERNMENT

Country	Unit (m. = million)	A. Central Government only B All public authorities	TOTAL EXPENDITURE				OF WHICH: MILITARY EXPENDITURE			
			1948 or 1948/49	1949 or 1949/50	1950 or 1950/51	1951 or 1951/52	1948 or 1948/49	1949 or 1949/50	1950 or 1950/51	1951 or 1951/52
Austria	Million schillings	A	5,302	6,741	*7,318*	*8,562*	355 [a]	525 [a]	*400* [a]	*300* [a]
Belgium	1,000 m francs	A	70.7	78 6	*77 3*	*78 2*	4 5	6 7	*7 2*	*12 5*
Czechoslovakia	1,000 m korunas	B	*67*	*89*	*132*	*166*	*7*	*8 6*	*9 6*	*10 4*
Denmark	Million kroner	A	2,238	2,394	*2,570* [b]		309	315	*400* [c]	*550* [c]
Finland	1,000 m. markkaa	A	..	122 7	*117 9*	*114 7*		4.5	*4 7*	*6.0*
France	1,000 m. francs	A	1,566	1,983	2,317 [d]	*2,780*	335	393	*469* [d]	*725*
Germany: western zones	Million DM	A		..	*12,768*				*4,448* [a]	*6,595* [a]
Hungary	1,000 m forint	B	*5.3*	*9.3*	*20 0*	*29 5*	*0 2*	*1 2*	*2 0*	*4.1*
Ireland	Million £	A	76.6	85.9	*94 0*	.	3.7	3.7	*4.0*	..
Italy	1,000 m. lire	A	1,361	1,460	*1,497*	*1,824*	271	302	*419*	*460*
Netherlands	Million guldens	A	.	4,237	*4,702*	*5,318*	.	672	*1,088*	*1,500* [c]
Norway	Million kroner	A	2,636	2,774	2,589	*2,685*	272	366	370	*553*
Poland	1,000 m new zlotys	B	12 0	17.4	*25 2*	*52 0*	1 2	1 8	*2 6*	*3 7*
Spain	1,000 m pesetas	A	15.2	16 6	*17 6*	*19.1*	5 7	6 3	*6.6*	*6 8*
Sweden	Million kronor	A	5,107	5,504	*5,130*	*5,752*	903	992	*888*	*1,153*
Switzerland	Million francs	A	1,594	1,552	*1,635* [b]	*1,805*	418	478	*518* [b]	*720*
Turkey	Million T£	A	1,368	1,320	*1,487*		469	435	*458*	.
USSR	1,000 m roubles	B	371	412	413	*452*	66	79	83	*96*
United Kingdom	Million £	A	3,299	3,507	3,350	*4,384*	760	745	801	*1,490*
Yugoslavia	1,000 m dinars	B	138	164	*174*	*173*	15	24	*28*	*29*

Sources and methods see Appendix B

NOTE — Italic figures refer to budget estimates The figures relate to calendar years, with the following exceptions Turkey · March/February, Denmark, Germany (western zones), Ireland, United Kingdom April/March, Italy, Sweden · July/June

On present prospects, some further deterioration in the terms of trade of most European countries as between 1951 and 1950 will make an additional claim on their resources which, as seen in Chapter 4, is unlikely to be offset to any great extent by increases in balance-of-payments deficits. But the major factors determining the changes in resources available for civilian use will be the increased requirements of the military services and the extent to which these may be offset by increases in total production.

The latest budget estimates for military expenditure in the various European countries in the financial year beginning in 1951, together with actual expenditure during the years 1948 to 1950, are shown in Table 66. In addition to the absolute amounts, military expenditure has been expressed as a percentage of total Government expenditure and, in so far as data permit, of the net national income. For western Germany and Austria, the figures for military expenditure represent the costs of occupation, which may best be regarded as an economic burden arising from the international tension. When considering these figures, it must be remembered that the percentages relating military expenditure to total Government expenditure are not strictly comparable between different countries owing to considerable differences in the scope of Government budgets. In particular, comparisons on this basis between countries of western and eastern Europe are misleading, since in the latter group of countries the State budgets generally embrace a larger part of the national economy. Moreover, in these countries (apart from the Soviet Union) the figures for a given country are not even fully comparable as between different budget periods, since the scope of the budgets has been greatly extended during recent years.

66

EXPENDITURE

Military Expenditure as Percentage of :								Country
Total expenditure				Net national income				
1948 or 1948/49	1949 or 1949/50	1950 or 1950/51	1951 or 1951/52	1948 or 1948/49	1949 or 1949/50	1950 or 1950/51	1951 or 1951/52	
6.7	7 8	*5.5*	*3.5*	1 4	1 7	*1 2*	*0 9*	Austria
6 4	8.5	*9.3*	*16 0*	1.8	2.7	*2.7*	*4.6*	Belgium
10 4	*9.7*	*7 3*	*6 3*		..	.		Czechoslovakia
13.8	13 2	*15 6*	.	1 9	1 8	*2 1*	*2.9*	Denmark
.	3.7	*4 0*	*5.2*		1 4	*1.1*	*1 4*	Finland
21 4	19.8	*20 2*	*26.1*	6.3	6.1	*6 4*	*9 3*	France
								Germany :
.	..	*34.8*	.			*6 4*	*9 5*	western zones
3.8	*12 9*	*10 0*	*13 9*					Hungary
4.8	4 3	*4 3*		1.1	1.1	*1 1*		Ireland
19.9	20 7	*28 0*	*25.2*	4.5	4.8	*6 4*	*7 0*	Italy
..	15 9	*23.1*	*28 2*	..	4.7	*7.0*	*9 7*	Netherlands
10 3	13.2	14.3	*20.6*	3 0	3 8	3 6	*4 9*	Norway
10.0	10 3	*10 2*	*7.1*					Poland
37.5	38 0	*37 5*	*35 6*	5 2	5 5	*4 3*	*4.4*	Spain
17.7	18 0	*17 3*	*20 0*	4 0	4 1	*3 4*	*4.1*	Sweden
26.2	30 8	*31 7*	*40 0*	2 4	2.8	*3 0*	*4.1*	Switzerland
34.3	33 0	*30 8*	.	6 5	6 0	*6.2*		Turkey
17 8	19 2	20 1	*21 2*					U S S R.
23 0	21 2	23 9	*34 0*	8 1	7 5	7 6	*13 4*	United Kingdom
10 9	14 6	*16 1*	*16 8*	..	..	..	.	Yugoslavia

a Occupation costs
b Revised budget estimates
c Preliminary estimate
d Probable results

For various reasons, the increases in money expenditure recorded in Government budgets tend to understate the true economic burden of military preparations. In the first place, Government outlays on the food, clothing and pay of the armed forces are much smaller, in most countries, than the value of the contribution which the men enrolled for military service would otherwise have made to the national product.[1] Secondly, there may be certain expenditure, both in the private sector and in the civilian Government budget, which is partly or wholly motivated by military considerations, although not of a direct military nature and not charged to the military budget.[2] It is safe to conclude, therefore, that the percentages of national income devoted to military purposes, as shown in Table 66, fail to reveal the full economic burden of these outlays.[3]

The ratio of military expenditure to national income in 1951 seems likely to increase in several countries by as much as 50 per cent, or even more, over the 1950 ratio. For some countries of western

[1] In the United Kingdom, for instance, where detailed military accounts are published, the pay and maintenance of men in uniform in 1949 amounted to about £325 per head, while output per head of industrial population was around £500.

[2] For instance, the economic plan for Norway for 1951 provides for a considerable increase in private investment in lorries, explicitly for defence purposes. Moreover, expenditure on certain para-military organizations is not included in the defence data in Tables 66 and 67.

[3] On the other hand, it must be borne in mind that the budget estimates shown in Table 66 refer to the fiscal year beginning in 1951, which in several countries does not coincide with the calendar year. It is also possible that, in some countries, the actual increase in expenditure will proceed at a slower rate than is indicated by the budgetary figures, but this may be offset by the fact that increased outlay on armaments is often financed in the private sector at the preparatory stages, so that it is reflected in Government accounts only with some delay.

Europe, the total of defence expenditure will thereby be raised to around 10 per cent of net national income, and in the United Kingdom the share will be even bigger. These estimates, it should again be stressed, do not take into account the indirect costs not reflected in Government budgets ; nor do they fully allow for the likelihood that the switch of production from civil to military purposes will involve bottlenecks and stoppages for re-tooling which will temporarily hold productivity and the national income at a lower level than it would otherwise have reached.

In the absence of estimates of national income for eastern European countries fully comparable to those of western Europe, an attempt has been made to establish a common measure of the economic burden of defence expenditure by expressing each country's expenditure in terms of the man-years of industrial labour which it would buy in that country. The figures of defence expenditure have, in other words, been divided by the average wage of industrial workers. It goes without saying that such calculations, the results of which are shown in Table 67, indicate only broad orders of magnitude of the relative amount of productive resources devoted to armaments. An addition of the corresponding absolute figures, with a rough allowance for countries not included in the table, would show that Europe, excluding the Soviet Union, is going to spend in 1951 the equivalent of some 14 or 15 million industrial man-years on defence, or about 35 per cent more than in 1950.[1]

[1] The figures presented in Table 67 can at best indicate the relative economic burden involved in military preparation ; they are wholly irrelevant for consideration of relative military strength, a question which is outside the scope of this SURVEY.

Table 67

DEFENCE EXPENDITURE EXPRESSED IN TERMS OF INDUSTRIAL MAN-YEARS

Rough estimates

Country	Defence expenditure in thousand man-years			Defence expenditure in man-years per thousand inhabitants		
	1949	1950	1951	1949	1950	1951
Belgium	120	130	210	14	15	24
Czechoslovakia	160 *a*	160	170	13 *a*	13	13
Denmark	50	60 *b*	75 *b*	12	14 *b*	17 *b*
France	1,600	1,700 *c*	2,200	38	40 *c*	51
Germany : western zones *d*	..	1,300	1,700	..	27	35
Italy	950	1,350	1,350	21	29	29
Netherlands	250	375	475 *b*	25	37	46 *b*
Norway	55	55 *c*	70	17	17 *c*	21
Poland	275	325	450	11	13	18
Spain	550	600	600	22	22	21
Sweden	180	160	180	26	23	25
Switzerland	75	85	115	16	18	24
United Kingdom	2,300	2,400 *c*	4,200	46	47 *c*	82
Yugoslavia	475	550	575	30	34	35
Total of countries listed	8,500	9,250	12,370	28	31	40
U.S.S.R.	8,400	8,800 *c*	10,200	42	43 *c*	49
United States *e*	4,700	4,600 *c*	11,400	31	30 *c*	74

Sources see Appendix B

NOTE — The figures for defence expenditure on which the estimates are based are those given in Table 66 They do not include expenditures on internal security, although these may in some cases embrace the cost of certain para-military organizations Expenditures on internal security, as shown in government budgets, are of a widely varying magnitude. Expressed as a percentage of defence expenditure, they amount in 1951 (1951/52) budgets to 50 in Czechoslovakia, 6 in France (after the recent transfer of the *Gendarmerie* to the defence budget), 12 in Italy and 135 in Poland

The figures in this table are rough estimates of the number of man-years of industrial labour in each country that the defence expenditure of that country would buy. The average cost of a man-year of labour, a necessary ingredient in the calculation, can only be very roughly estimated for some countries ; although an attempt has been made to include in wage-costs social benefits such as family allowances, paid holidays and social insurance the cost of which is borne by the employer, there may still remain some inconsistency as between different countries ; moreover, no adjustment has been made for differences between the various national definitions of defence expenditure Inter-country comparisons for any particular year are therefore significantly less reliable than inter-temporal comparisons for any particular country

Except in the case of the United States and Norway, the figures relate to the fiscal years beginning in the years indicated in the column headings Unless otherwise indicated below, the estimates for 1949 are based on figures of actual expenditure as recorded in closed accounts or on provisional estimates of actual expenditure, those for 1950 and 1951 are budget forecasts

For details of the calculations, see Appendix B

a Budget forecast

b Preliminary estimate

c Closed accounts or provisional results.

d Occupation costs.

To sum up, a number of European countries are faced with additional armaments expenditure in 1951 amounting, in several cases, to 3 or 4 per cent or more of national income. In some of them, the adverse effects of the changed price relationships in foreign trade may amount to another 1 or 2 per cent of national income. In most instances, these increased claims on the national product could be more or less offset by increased production if the maximum potential increases indicated at the end of Chapter 2 could be fully achieved. It was estimated there—without allowing for industrial disturbances due to shortages of raw materials and shifts in production from civilian-type to military goods—that output in the industrial sector might be increased in 1951 by about 7 per cent in the United Kingdom, the Netherlands, and the Scandinavian countries, and—assuming full use of all technical possibilities—by as much as 14 or 15 per cent in France, Italy, and Belgium. These increases in the output of industrial goods are, however, unlikely to be realized, as is indicated in Chapter 3, when account is taken of shortages of industrial materials and when allowance is made for other disturbing factors ; and it must also be remembered that total national output, including that of agriculture and services, ordinarily rises rather more slowly than industrial production alone. For countries now embarking on heavy armaments programmes, it is safe to conclude that the increase in civilian consumption and investment will be extremely small at best and that in some countries there may be an absolute reduction in living standards. Since these adjustments are to take place at a time when the structure of prices and incomes has already been disturbed, the possibility of achieving them without further inflation seems remote.

The forces of inflation are at work in virtually all European countries, but in different combinations and strength, depending on industrial structures, the degree of dependence on foreign trade, and the extent of the rise in defence expenditure. Moreover, the methods used in different countries to bring about the desired re-allocation of resources and to reduce the inequities and inefficiencies of inflation—not to say the degree of success or failure of their policies—are bound to depend in part on their institutions and traditions and their past experience of inflation. Inflationary manifestations in eastern European countries in particular appear to be very different in origin and form from those found elsewhere, and will be considered first before proceeding to a consideration of the problems as they present themselves in western Europe.

2. Monetary Problems in Eastern Europe

Complete State control over the larger part of the economy, together with the relatively small dependence on foreign trade, tends to place the Governments of eastern European countries in a favourable position for securing monetary stability. Within technical limits, the supply of different kinds of goods, as well as their prices, is largely a matter of State decision and control, and the State should also be in a position to fix total monetary demand through the determination of the national wage bill and the concentration of investment activity in its own hands. There is little possibility of major price disturbances of external origin : trade with countries outside the area, always relatively small, has been progressively reduced, while the formerly small but now rapidly expanding trade among countries within the area is conducted largely on the basis of prices set under long-term agreements. Furthermore, by appropriate methods of subsidies and taxes, price increases for imported materials, as well as for export goods, can be prevented from affecting the internal price levels. In other words, price changes in foreign trade can be readily neutralized by variations in the effective rate of exchange, which may vary widely from the official rate and from one commodity to another.

If over-all balance between demand and supply is secured, the question remains whether the benefits from increased productivity should be reaped in the form of lower prices (while keeping nominal incomes stable) or in the form of higher money incomes (while keeping prices stable). The choice between these alternatives is by no means a purely formal one, concerned only with the nominal level at which prices and incomes are reckoned ; if the second alternative

is followed, there is a strong presumption—as experience has shown—that the increase in money incomes will be concentrated on precisely those trades the productivity of which has risen. In that case, the distribution of income and the cost and production structure are shifted in a way that is not in accordance with the true supply price of labour.[1] The first alternative, which is that postulated in classical economic theory, has become the regular practice in the Soviet Union, where a series of price reductions has been decreed at the beginning of each year since 1948 [2], while in western economies the practice has increasingly been to take out increased productivity in the form of higher wages in the trades concerned.[3]

In the other eastern European countries of planned economy, the combination of stable nominal incomes and falling prices also appears to be the aim of economic policy. However, in actual practice, those countries have recently been faced with serious problems of controlling inflationary pressure arising from the cost side. In the absence of statistics on prices, money and banking, it is not possible to follow the developments in detail, but the main problem of internal equilibrium with which these countries are confronted is clearly indicated by available information on employment and wages, as shown in Table 68. It appears that, in Poland, Czechoslovakia, Hungary and Rumania, the total wage bill increased from 1949 to 1950 by as much as 25 to 35 per cent, owing both to increased employment and to higher wage rates. Since most of the figures relate to the socialized sector of the economy only, the increase in employment may partly reflect a transfer from private to State-controlled occupations, but, even if this is taken into account, it seems clear that money incomes

Table 68

EMPLOYMENT, AVERAGE WAGES AND TOTAL WAGE BILL IN THE NON-AGRICULTURAL SECTORS OF FIVE EASTERN EUROPEAN COUNTRIES, 1950

Index numbers — 1949 = 100

Country	Employment	Average money wage	Total wage bill
Bulgaria .	108 *a*	106	114
Czechoslovakia .	108 *a*	118	127
Hungary	115	112	129
Poland . . .	108	117 *a*	126
Rumania . .	124	111 *b*	138 *a*

Sources and method: see Appendix B

a The figures are derived from the data shown in the other two columns

b Refers only to industry

have tended to increase at a faster rate than can possibly have been the case with the output of consumers' goods.[4] The causes of the increase in wage incomes are similar to those experienced in western countries with fewer socialized industries but high levels of employment. Labour is scarce and there is a great desire to increase productivity ; national enterprises, willy-nilly, bid up wage rates, and increasing emphasis on piece-rate working [5] and special incentive schemes drive up average earnings, in some cases even faster than productivity.

Against this rising tendency of money earnings, the output of agricultural goods has increased only moderately,[6] and the rise in the output of industrial consumers' goods, although considerable in itself, was distinctly lower than the over-all increase in industrial production. Thus, in Poland, the increase in the output of textiles from 1949 to 1950 was of the order of 10 per cent, and total agricultural production is reported to have increased by some 13 per cent. In Czechoslovakia, the output of textiles and clothing is reported to have risen by 9 per cent.

[1] A closely connected problem is encountered in the international field . broadly speaking, the benefits from increased productivity in the highly industrialized countries have not, as pre-supposed by the classical theory of international trade, been spread to other countries through lower prices See for instance, Raul Prebisch, *The Economic Development of Latin America*, Economic Commission for Latin America, United Nations Department of Economic Affairs, 1950.

[2] The price reductions announced in early 1951 were considerably smaller than in the preceding years. This seems to indicate that the rate of increase in the output of consumers' goods, after some years of rapid recovery, from the very low levels after the war, is now settling down to a more normal proportion.

[3] In the United Kingdom, for instance, under the policy of wage restraint, adjustments of wages have come to be considered as permissible whenever they can be shown to be associated with an increase in output in that particular occupation.

[4] The situation appears to be not unlike that existing in the Soviet Union during the First Five-year Plan, when the vigorous increase of employment and nominal incomes gave rise to a serious shortage of consumers' goods.

[5] See *Economic Bulletin for Europe*, Vol. 2, No. 2, page 59, Table 7.

[6] An important exception is pig-meat production in Poland. It was mentioned in Chapter 2 that the number of pigs rose by 33 per cent from 1949 to 1950.

The discrepancy between demand and supply for consumers' goods has occasioned a wide range of measures of economic policy, in order to wipe out hoarded purchasing power, to strengthen the control of wage developments, to promote savings and to prevent an increase in the price level by the rationing of basic necessities.

In Poland, an inflationary tension arising in the latter half of 1949 was counteracted at the end of the year by a considerable increase of food prices paid by consumers, while prices paid to farmers were left unchanged. Also, the prices for some industrial goods were increased and the cost-of-living index rose by about 10 per cent between 1949 and 1950. In addition to the lack of balance between current income and the supply of consumers' goods, Poland was faced with the problem of hoarded purchasing power. This was dealt with by the monetary reform of October 1950, through which the value of private money holdings was reduced by two-thirds. By drastically reducing purchasing power in the hands of non-wage-earners, the reform appears to have served the double purpose of relieving the existing buying pressure and of reducing the economic strength of private traders and the more well-to-do peasants. The latter were hit particularly hard, since both their money holdings and their loans to small peasants were depreciated. In the months following the monetary reform, the increasing trend of prices seemed to have stopped and, at the end of 1950, some consumer prices were reduced, whereby the cost of living may have declined by a few per cent.

In contrast to Poland, the bulk of consumers' goods continued to be rationed in Czechoslovakia, where conditions of suppressed inflation still exist. The main instrument for mopping up surplus purchasing power is the " general tax " on additional supplies of rationed goods, which can be freely bought at very high (but controlled) prices. This tax accounts for about half of all public revenue. In the middle of 1950, reductions of 10 to 20 per cent of " free " prices of the main agricultural products were announced, but, under the double-price system prevailing, it is difficult to judge the effects on the movement of the cost of living. In the latter half of the year, the rise in wage incomes caused serious concern and it was announced that, under the prevailing conditions, further reductions of free prices or the abolition of rationing could not be expected. At the same time, it was announced that, in order to get wage developments under stricter control, a central wage authority was to be established in 1952. Meanwhile, special measures have been introduced to control the total wage bills for the different branches of the national economy. As from March 1951, ordinary wage rates are to be applied for Sunday and other overtime work, and wage efficiency standards are to be hardened. In the beginning of 1951, rationing of bread and flour, which had been discontinued in 1949, had to be re-introduced. The difficulties in the supply of bread grain in Czechoslovakia seem to be due to a relative shortage of coarse grain which, in conjunction with the very low price of bread, caused excessive feeding of bread grain and even bread to animals.

In Hungary, difficulties arose from a strong upward movement of wages which lasted until the middle of 1950, and in the second half of the year inflationary pressure was enhanced by an increased propensity to spend. In July 1950, the rising trend of wages was checked by a drastic hardening of efficiency standards and a rearrangement of basic wage rates.[1] Furthermore, attempts were made at relieving the wage pressure through direction of labour. As in the case of Czechoslovakia, it is intended to institute a central wage authority which would have to draw up a wage bill, taking into account all sectors of the economy. Although wage levels remained stable in the latter half of 1950, shortages arose for several food products, owing partly to a decline of livestock production and partly to scare buying, and a growing proportion of agricultural products was traded through illegal channels. In the beginning of 1951, rationing was introduced for bread, flour, sugar, butter, fats, soap and (in Budapest) milk, while maintaining free sales off the ration at higher " commercial " prices. The strong propensity to spend, both in towns and in the countryside, is apparent from the fact that institutional savings hardly increased during 1950. In order to stimulate savings the National Savings Bank was reorganized, lottery savings books were introduced and attempts were also made to stimulate private saving through the organization of building co-operatives.

In the countries considered so far, inflationary pressures arose in 1950 against the general background of rising living standards and, therefore, the disturbances were of limited scope. Yugoslavia was faced

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[1] See *Economic Bulletin for Europe*, Vol. 2, No. 2, p. 60.

with more intractable problems, since in that country a serious discrepancy between money income and supply of consumers' goods developed as a result of a decline in production while money income of wage-earners remained fairly stable. The decline in agricultural production, due to a severe drought, was of the order of 25 per cent ; at the same time, the output of industrial consumers' goods increased only little from 1949 to 1950, and for textiles there was even a decline of 4 per cent. Under these conditions, the main problem has been to secure deliveries of products from agriculture, while avoiding too big a change in the price relationship between agricultural and industrial goods. Production and deliveries of agricultural products were encouraged by enlarging the rights of peasants to sell on the free markets, and at the same time the increase in the purchasing power of peasants was to some extent checked by increases in the prices of some industrial goods. In order to alleviate the effects on the cost of living, the already low prices of rationed food were reduced by 30 per cent in January 1951. Thus, the price gap between rationed and unrationed goods has widened considerably.

3. The Experience and Problems of Western European Countries

Prices and Production since the War

The difficulties now faced by western European countries must be seen against the background of their past experience in dealing with inflation. Though that experience has varied widely, certain basic similarities can be found among those countries which, by choice or necessity, have relied chiefly on credit control as the main weapon of anti-inflationary policy, and which show, on the other hand, certain fundamental differences compared with other countries relying more on a combination of fiscal and administrative measures. The first group is typified by France, Italy and Belgium, the second by the United Kingdom, Sweden and the Netherlands. The comparative analysis of industrial production given in Chapter 2 has already shown the considerably less favourable results attained, both since the war and in relation to pre-war levels of output, by countries in the first group as compared with those in the second. These contrasting results on the side of production are not unrelated to differences on the side of money, and a further analysis of the experience of these countries serves to illustrate the lurking dangers in the situation in which most European countries now find themselves.

The movements of prices and production since the war are shown in Chart 8 for each of these countries. It will be seen that the United Kingdom,[1] Sweden, and the Netherlands have all experienced a slow but steady rise in prices accompanying the large and sustained increase in their industrial output. In the other three countries, both prices and production have moved in much more irregular fashion, but with a similarity suggesting that both series have been affected by common factors. It is broadly true to say that, in these countries, production expanded only during periods of rising prices, while it stagnated in periods of monetary stability. Thus, in France, the years 1946 to 1948 were a period of more or less continuously rising prices associated with a more or less steady increase in production, while, from the first quarter of 1949 up to and including the second quarter of 1950, prices remained constant or fell, and production was slightly falling. In the second half of 1950, when the price level started rising again, the expansion of production was resumed. Similarly, in Italy, the monetary stabilization in the third quarter of 1947 brought the period of expansion in production to a halt, and up to the last quarter of 1949 fluctuations in output coincided broadly with fluctuations in wholesale prices. It is only in 1950 that production shows a clear improvement, rising significantly above the 1929 level. Again, in the case of Belgium, where prices were stable or falling up to the middle of 1950, the level of production more or less stagnated between the beginning of 1948 and the middle of 1950, the rise in output in the second half of 1950 coinciding with the reappearance of a period of rising prices.

It should also be noted that, in the United Kingdom, Sweden and the Netherlands, the level of employment was steadily and slowly rising throughout the post-war period, and unemployment amounted to only some 1 or 2 per cent of the working population. In France, Italy and Belgium, on the other hand, there were fluctuations in employment, although of a much more moderate character than in production, and

[1] The dip in production and employment in the United Kingdom in early 1947 was due to the coal crisis, which caused an interruption in production.

in all three of these countries industrial production appears to be well below capacity. Belgium and Italy have heavy industrial unemployment and large reserve plant capacity. In France there is practically no visible unemployment, but there seems to be a relatively heavy staffing of the service trades and considerable disguised unemployment in the form of part-time work. The relative stability in industrial employment is partly to be explained by the fact that variations in demand and production are reflected in changes in the number of hours worked rather than in changes in the number of industrial employees.

A final observation which may be made from the charts [1] and which is relevant to a consideration of the future implications of the present inflationary situation, is that France, Italy and Belgium have not until very recently progressed beyond their pre-war peak levels of production, which was in 1939 in Italy and as long ago as 1929 in France and Belgium (whose output in the 1930's did not regain the pre-depression levels). By contrast, in 1950 industrial production exceeded the pre-depression level by about 65 per cent in the Netherlands, 80 per cent in the United Kingdom, and as much as 140 per cent in Sweden.[2]

From the foregoing facts, it appears that countries —such as France, Italy and Belgium—which rely on credit policy as their principal means for ensuring monetary stability have been able to stop the rising trend of prices (at any rate over certain periods), but have been able to do so only at the expense of halting the advance of production and holding it well below the technical limits set by total supplies of manpower and plant capacity. The inability of these countries to have both sustained progress and monetary stability does not necessarily mean that their policy has been "deflationary" in the sense that credit is tightened beyond the point needed for price stability. The experience suggests rather that, within the limitations imposed by their policies, the expansion of activity to near-capacity levels always involves a renewal of the inflationary danger. One of the main reasons for this is that it is largely in the investment sector that idle resources exist and that the supply of at least one important item of consumption—namely food—is inelastic. Unless, therefore, effective measures can be taken to sterilize the additional purchasing power generated by production, the expansion of economic activity in itself leads to an increase in prices in the consumption sector [3] and a lowering of the real income of those already employed, even though there is an increase in the consumption levels of those newly brought into employment or of those whose income has risen owing to working longer hours. This redistribution of real income through an increase in the cost of living in relation to the ruling level of wages is bound to create strong pressure for wage increases, even when aggregate real wages are rising because of the growth of employment. The pressure is liable to be particularly strong in those countries where large differences in wealth and consumption standards make workers unwilling to accept sacrifices in their real income. In brief, an expansionary policy tends to set inflation going long before full employment is reached.

In the United Kingdom, Sweden and the Netherlands, on the other hand, Governments have been able to sterilize a greater proportion of the extra incomes generated by an expansion of production and, as a result, the concomitant price rises, although they have not been negligible, have been smaller. Governments, therefore, have been willing to encourage production to go on increasing up to the point of maximum utilization of labour and capacity, beyond which further increases can be achieved only by measures to raise productivity. The inflation problem in these countries has not, however, been solved, as is apparent not only from the fact that prices have risen continuously since the war, but also from the various weapons employed to hold demand in check. Governments in these countries have been more willing than others to prolong the wartime rationing of scarce commodities or even to extend rationing to new commodities,[4] to control the allocation of scarce materials by administrative measures, and to guide or influence investment. They have also been aided in holding inflation within bounds by two basic advantages over Governments in the other group of countries.

[1] See Chart 9.

[2] Sweden had been able to make exceptionally great progress in its industrial production in the 1930's compared with other countries largely because of the extraordinarily strong demand for its exports.

[3] In so far as the additional output in the investment sector can be exported, thus leaving room for additional imports of consumers' goods, the inflationary pressure arising from the inelasticity of home production of consumers' goods is mitigated.

[4] In the United Kingdom, bread rationing was imposed for the first time after the war.

Chart 8

PRODUCTION AND PRICES FROM 1946 TO 1950

Logarithmic scale

A. Industrial production 1946-1950
B. 1938 level of industrial production
C. Industrial employment

} *1929 = 100* (for Sweden : 1930 = 100). Left-hand scale

D. Wholesale prices for industrial goods. *January 1946 = 100.* Right-hand scale

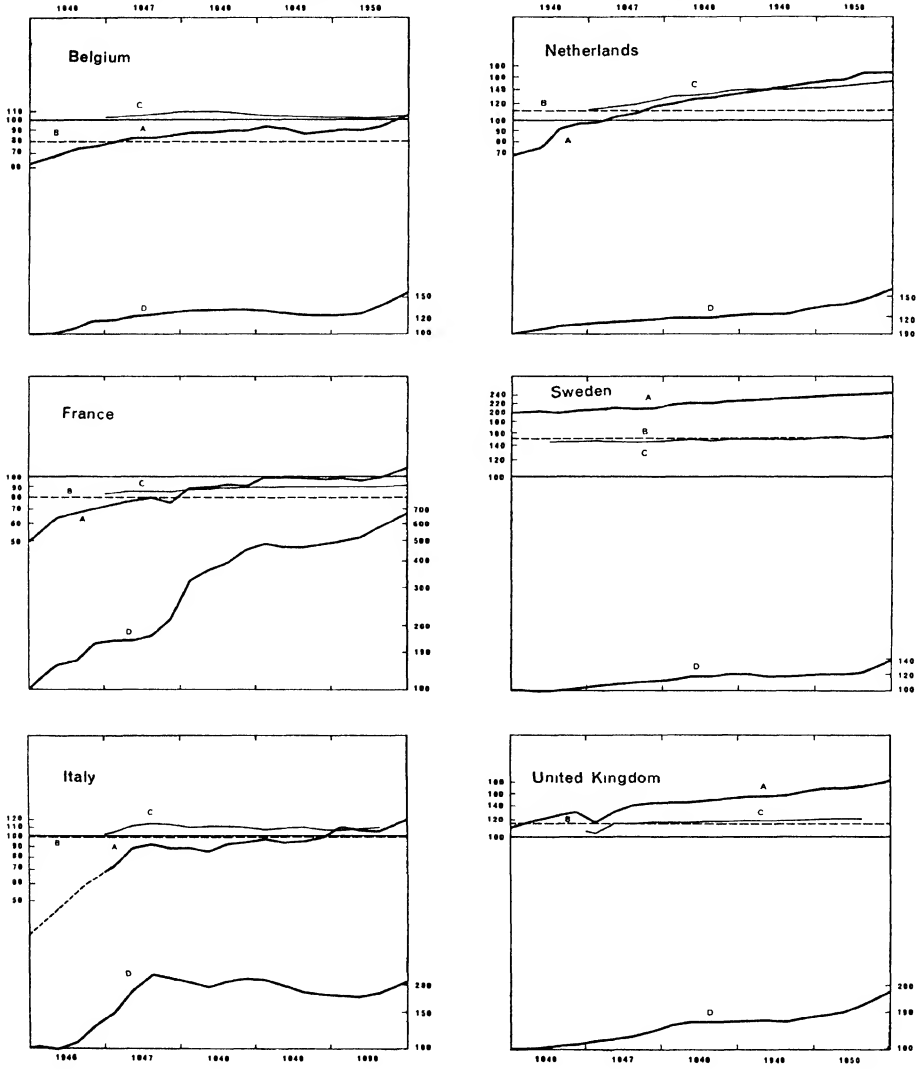
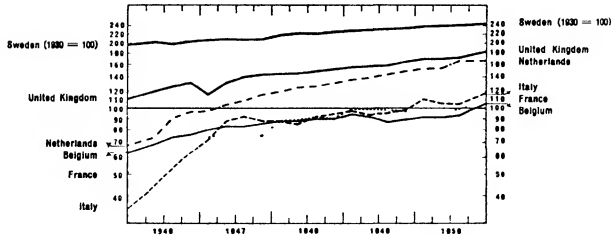


Chart 9

INDUSTRIAL PRODUCTION FROM 1946 TO 1950

Index numbers (1929 = 100). Logarithmic scale



The first of these advantages stems from their level and distribution of income and their tax systems. Incomes not only are higher in general in the United Kingdom, Sweden and the Netherlands than in France, Italy and Belgium, but they also appear to be more evenly distributed. Through efficient tax systems—rates which are both high and highly progressive, and a relatively high standard of tax morality [1] —large proportions of any additional incomes generated in production are automatically siphoned off. The importance of this factor can be seen from Table 69. Both the level and the progression of tax-rates appear to be roughly similar in the Scandinavian countries, the Netherlands and the United Kingdom. In France, although the rates on the highest incomes are lower, the rates of tax on the middle incomes are about as high as, and in Italy not greatly less than, in the Scandinavian countries. But the differences in the total amount of income tax collected are much greater than can be explained by differences in tax rates alone. While it amounts to 10 to 12 per cent of national income in the Netherlands, the Scandinavian countries and the United Kingdom, the corresponding percentages were only 5½ in France and 3½ in Italy. These discrepancies point to the generally acknowledged fact that, in France and Italy (as also in western Germany since the war), tax evasion presents a major problem. In France, the income tax was re-modelled on the northern pattern in 1948, but can hardly be expected to work efficiently until shortcomings in tax assessment and collection have been eliminated ; Italy wholly lacks a modern tax structure.[2]

The second great advantage enjoyed by the northern group of countries is that they have never experienced in recent times a serious and progressive weakening of public confidence in the value of money. Although the decline in the buying power of money during the war was substantial and has since then proceeded gradually, it has never been sufficiently acute and sustained to affect greatly the behaviour of business men and consumers. Some traders, however irrational their behaviour may be, still adjust their selling prices only when they have to acquire new stocks at higher prices ; they do not at once pass on every rise in the replacement costs of their existing inventories. In general, the Governments of these countries have been able to apply controls on consumption and investment without fearing that a large part of the expenditure so frustrated would be diverted to other goods whose prices would be bid up. In France and Italy, on the other hand, the great inflations experienced during and after both world wars have left a residue of public distrust in the lasting value of money and a sensitive-

[1] This should not be interpreted as implying that tax evasion is not a problem in northern countries also For obvious reasons, little statistical information is available on its extent, but it is known, for example, that after the Danish monetary reform of 1946, which brought to light assets hitherto hidden from the tax authorities, taxable capital rose suddenly by about 15 per cent It is also known that the taxed profits of individuals and companies engaged in agriculture and horticulture in the United Kingdom in 1947 were about £125 million, whereas the official estimate of " income from farming ", conceptually not very different, in the same year is £205 million.

[2] See *Economic Bulletin for Europe*, Vol 2, No. 3, pp 62-67.

Table 69

EFFECTIVE RATE OF INCOME TAX FOR A MARRIED COUPLE WITH TWO CHILDREN

Percentages of family income

Country	Year	Income tax liability as a percentage of income before tax for family income amounting to .												Total amount of income tax actually paid as per cent of net national income
		3	4	5	7	10	15	20	25	30	40	50	100	
		times net national income per head of population												
Norway (Oslo) .	1949	12	15	18	25	31	37	42	45	48	55	58	70	14 *a*
Netherlands . .	1949	8	12	15	21	26	33	38	42	46	50	54	63	12
United Kingdom	1949	9	14	18	23	27	37	43	48	52	59	63	78	11
Sweden (Stockholm) . .	1949	14	16	20	25	30	36	42	45	47		.		11
Denmark (Copenhagen)	1949	15	17	20	23	27	31	33	35	36	38	39	42	10
Finland (Helsinki) .	1949	10	13	15	18	23	29	35	39	43	48	51	60	8–9
Austria . .	1950	6	9	11	17	23	30	33	36	37	38	40	44	7.5
Germany : western zones	1950	5	9	12	19	26	32	37	39	43	47	51	65	7
France	1950	14	18	21	23	26	30	32	35	37	42	44	53	5 5 *b*
Italy	1951	.	.	19	21	23	26	27	28	30	32	33	38	3 5 *a c*

NOTE — The rates of income tax shown for different levels of income refer to central and local government taxes on earned income The figures in the last column, showing the total amount of taxes paid, include, in addition to income tax proper, ordinary annual property taxes levied on persons For Italy, where no unified system of income-tax exists, the figures refer to the total of (*a*) the scheduled tax on entrepreneurial income (*ricchezza mobile*, cat B), (*b*) the general tax on personal income (*imposta complementare*) and (*ii*) the local tax on income of families

a Includes an amount of income tax levied on corporations

b Including the tax on wage bill (*versements forfaitaires des employeurs*).

c 1948/49

ness to price movements which goes far to explain the difficulties of Governments in these countries in undertaking any substantial monetary expansion. The greater volatility of expectations on the part of both buyers and sellers tends to make for relatively rapid transmission of price increases throughout the economy, once a significant movement seems to be under way.

While their past experience and monetary institutions are very different, neither of the two groups of countries distinguished in the present analysis is likely to find it easy to assimilate and master inflationary forces of the present magnitude. France and Italy are clearly ill-equipped to cope with any kind of inflation except by their traditional method of throttling production through credit restrictions. In addition to the direct claims on current resources represented by the deterioration in the terms of trade and the increase in military outlays, a renewed experience of inflation in these countries would mean the postponement of the monetary stability and confidence needed if they are to be able in the future to carry out policies of economic expansion.

Nor has the relative success of the northern countries in damping down domestic inflation in the past much relevance to the present situation. Hitherto, the danger to monetary stability in these countries has come not so much from the difficulty in restraining demand as from the side of costs. The bargaining position of labour was bound to be good in countries where there was full employment and profits were high. The Governments of these countries could therefore achieve even moderate monetary stability only if they could hold back demands from the trade unions for rises in money wage-rates. In part they aimed to do this by actively controlling those retail prices which entered into the cost-of-living indices used in wage negotiations. They have thus sometimes been willing to grant subsidies on consumers' goods even if their direct effect was to raise demand above what it would otherwise have been. They have also endeavoured to control profit margins on consumers' goods. But very largely they have been dependent on the good will of the trade unions. The fact that in some countries the trade unions were active political supporters of the Governments in office doubtless helped. Some of the institutional factors mentioned earlier were, however, perhaps equally important. It is easier for trade unions to show restraint if they know that taxation is progressive, tax evasion small and dividends limited. It was also important that average real income was rising. On the other hand, the fact that the increase was distributed in the form of increased earnings by piece-workers rather than in the form of

reductions in prices tended to produce a gradual rise in the price level, because of the periodic necessity for adjusting upwards the rates of wages of time-workers and workers in industries offering small scope for increases in productivity.

One of the main props of the policy of money-wage stability in the northern group of countries will be removed if rises in import prices are passed on to the cost-of-living index, as seems everywhere to be happening. A scramble for wage increases has already gone some way in all of these countries, but there is little reason to think that the wage-price spiral will not continue to mount. As a result of this process, there is a risk that these countries will lose one of the great advantages which they have enjoyed rather longer than price developments over the last decade have justified—that is, confidence in the lasting value of money.

France

Since the summer of 1950 there has been, in France, a distinct improvement in production and, at the same time, a considerable increase in the price level. Industrial production, which had stagnated between the middle of 1949 and the autumn of 1950, was in the first quarter of 1951 at a level 8 to 10 per cent higher than a year earlier. Price developments have been less favourable. Wholesale prices rose by 30 per cent during the nine-month period from June 1950 to March 1951, and for industrial products (the price index for which, however, does not include finished manufactures) they rose by as much as 46 per cent. In the same period the cost of living increased by about 15 per cent. In March 1951, an all-round lifting of the wage level by 12 to 15 per cent occurred. These price movements are much stronger than could be accounted for as a direct and inevitable result of the increase in foreign prices. It seems that, in the case of France, the external forces have been accompanied by speculative movements which have resulted in a particularly strong and swift increase in the internal price level. A further symptom of the boom atmosphere prevailing in France is the evidence of an increase in the velocity of circulation : from January 1950 to January 1951 the amount of money in circulation increased by 16 per cent only, while the value of turnover can be estimated to have increased by about 25 per cent.

The expenditure on war and rearmament envisaged in the French budget for 1951 amounts to about 800 billion francs,[1] or some 10 per cent of net national income as against 6 per cent in 1950. For subsequent years a further increase is expected, but no definite plans have been laid down. Even though the full amount planned for 1951 may not actually be spent in that year, the armaments programme involves a heavy burden on the French economy compared to which the real loss incurred through the deterioration of the terms of trade is of minor importance. Industrial production in 1951 may well be some 10 per cent higher than in 1950, but for agriculture an output no smaller than in 1950 seems to be the most optimistic forecast that can be made. The total increase in the volume of output can therefore hardly more than offset the increase in military outlay.

This situation would involve inflationary dangers in any country. It is particularly serious in France, which has only recently emerged from a period of violent monetary disturbances and where the maintenance of equilibrium seems to be contingent on a fairly steady increase in consumption levels.

The high vulnerability of the French economy to inflationary impulses arises partly from the monetary experience of the country during the past thirty-five years and partly from the special burden which destruction in two wars has imposed on the economy.

The characteristic feature of monetary developments in France since 1914 is the regularity with which the purchasing power of the franc has decreased. Other European countries have known, for short periods, much more violent inflation, but in France inflation appears, in retrospect, as one continuing process, interrupted only by a short period of stabilization, from 1926 to 1929, and by the great depression. This has had serious effects on the willingness to save out of personal income.[2] The lack of confidence in monetary stability not only reduces the total of private savings, but also tends to lead to a direct linking of the acts of investment and saving in a way which is not conducive to the best allocation of

[1] Out of this total, an amount of 70 billion francs was covered by financial assistance from abroad in the first half of 1951 A further allocation of the same order of magnitude is expected in the second half of the year

[2] In spite of a high level of interest, 1949 was the first year since 1935 in which savings in fixed revenue assets yielded a positive interest (of the order of 1 per cent) after taking the rise of the price level into account.

available investment resources.[1] The low level of personal savings in the post-war years is, of course, a particularly serious matter in a country where political and psychological difficulties militate against the introduction of the severe and efficient tax systems needed for substituting public for private saving.

On this psychological and institutional background, France, emerging from war and occupation with an extremely low real income and a large depreciation of her national wealth, embarked in the first post-war years on a big programme of public investments, and at the same time carried through a large extension of social security. These departures, both badly needed, were financed, to a large extent, through inflation. In 1950, the real value of hourly earnings still remained below the pre-war level, while the sum of wages proper and social payments had risen approximately to the same extent as prices. The whole system of social security had actually been financed by a huge re-distribution of income within the working class.[2] The reduction in the real value of hourly earnings naturally enhanced wage claims.

Towards the end of 1948, the post-war inflation came to a standstill lasting until the middle of 1950. This stabilization was attributable to a large increase in the output of consumers' goods, both agricultural and industrial. For the first time since 1940, food demand was met by production, and agricultural prices fell considerably. On the other hand, prices of basic industrial materials were raised, effecting a shift of income in favour of profits in large-scale industry, and thereby an increase of savings. At the same time, the Government made an effort to strengthen direct taxation by modernization of the tax system and the introduction of an extraordinary levy.

It is important for the evaluation of the problems with which France is now faced to bear in mind that the relative stabilization of the monetary situation in 1949 was based on a very favourable development in the supply position, which made possible a significant rise in real wages simultaneously with an increase in the share of profits in total income.

In addition to the low rate of saving and the likelihood of continued pressure for wage increases, the inflationary dangers are also enhanced by the low mobility of labour, which tends to prevent an increase in production in response to higher demand. The low labour mobility is to be explained mainly by the failure of the population of working-age to increase and the severe housing shortage, which binds people to the place where they happen to have an apartment. The housing shortage, in turn, could not be remedied without an increase in the number of building workers, which has actually fallen during recent decades.[3]

The new problem for economic policy in France, arising from rearmament, is the double one of maintaining over-all budgetary equilibrium and of preventing an inflationary movement arising from particular shortages in fields where armament demand competes with civil demand. The State budget proposed for 1951 foresees a slight reduction of public investment and an increase in taxation which, together with an expected increase in foreign aid, would still leave an over-all Government deficit considerably greater than in 1950. The dynamic development in the last months of 1950 and the first months of 1951—before actual armament expenditure had started on a large scale—makes it doubtful whether it will actually be possible to hold the budgetary deficit to the level originally planned. The main difficulty is that increased rates of indirect taxation tend further to raise prices and thereby wage demands, while higher rates of direct taxation may lead to higher rates of tax evasion rather than to higher proceeds. Although definite progress

[1] The most extreme example of this is gold hoarding. Privately hoarded gold in France has been estimated to amount to no less than 2,000 billion francs.

[2] While in 1950 the cost of living was 17 to 18 times as high as in 1938, hourly earnings of male workers in Paris were only about 11 times as great. For male and female workers together, the index of the average hourly earnings for the whole country had risen to about 1,500 (1938 = 100) and, if social security payments and family allowances are added, and the lengthening of the working-week is taken into account, the index rises to about 1,850. (See A. Sauvy : " Les Salaires dans l'Economie française ", *Revue économique*, December 1950, p. 514.)

[3] In 1950, it is true, the limiting factor in house production was lack of credit, but an expansion of building activity would very soon reach the much more intractable bottleneck of manpower. In 1950, the number of new dwellings built was 60,000 to 70,000. This figure might conceivably be raised to about 100,000 by a full utilization of all available manpower. However, in order only to meet the needs arising from the change in the size and structure of the population and to cover current deterioration—i.e. to prevent a further reduction of the housing standard—a yearly production of 190,000 dwellings would be necessary. If, in addition, the effects of the two wars and the under-maintenance between the wars were to be made good over a period of thirty years, the yearly number of new dwellings built would have to exceed 300,000. (See L. Henry : " Perspectives relatives aux besoins de logements ", *Population*, 1950, pp. 493-512.)

has been made during recent years,[1] there is general agreement that tax evasion presents a very serious problem ; it clearly cannot be radically solved from one year to another.[2]

Italy

In an earlier part of this section, Italy was mentioned as one of the countries which, since the war, have succeeded in arresting inflation only by restricting credit to the point of holding production well below its technical limits. In 1951, the Italian engineering industry is likely, as one of the few engineering industries still with excess capacity, to receive increased export orders, and the margin for an expansion will, to that extent, be enlarged. On the other hand, the Government of Italy is, itself, planning a considerable increase in defence expenditure, and this, together with the stimulus of increased import costs, entails the danger of a relapse into inflation. So far, the rise in the cost of living has been moderate—10 per cent during the twelve months ended in March 1951.

A further rise in the price level might seriously endanger the realization of the development projects, the initiation of which was the main event in Italian economic policy in 1950.[3] Even if the sums allocated to such projects as land reform and development of the neglected south are not cut down to provide money for more expensive armaments, their real value is likely to fall. (An actual increase in the cash appropriations to offset this could hardly be expected unless there were countervailing and—in the absence of a thorough tax reform—unlikely increases in direct tax revenue, since the net result would otherwise be to increase inflationary pressure still further.) There is thus a danger that, unless effective measures can be taken to curb inflation, the cost of the increased defence bill and the adverse movement of the terms of trade may, paradoxically, be as great, in terms of lost investment, as if Italy had already achieved full employment instead of having the largest reservoir of unused manpower in Europe.[4]

This is only another way of stating the fundamental problem of economic policy in Italy : its inability to achieve sustained expansion without inflation. This problem is more serious in the case of Italy than in the case of, say, France, because Italy, with a regularly and rapidly increasing population of working-age, needs a regular expansion of production if an actual increase in unemployment is to be avoided. The size of the problem can be illustrated from the experience of the last year. During 1950 there was, as noted in Chapter 2, some expansion in industrial production, a considerable increase in building activity and, partly as a result of an increase of 50 billion lire in spending by foreign tourists in Holy Year,[5] an increase in the activity of the tertiary industries providing services. Yet the official estimate [6] is that the labour market managed to absorb no more than the full increase in the working population, some 150,000 after allowing for net emigration. About one-fifth of the total active population, about 4 million persons,[7] remained unemployed. In some respects the situation even deteriorated. Thus, in January 1950, 20 per cent of the registered unemployed were young people looking for their first jobs , a year later the proportion had increased to 23 per cent. Similarly, the ratio of employed juveniles (persons aged less than 18) to the total numbers employed, which had been 6.7 per cent in 1948 and 5.9 per cent in 1949, was only 5.4 per cent in 1950.[8]

[1] The recent improvement in tax revenue can be seen from the following figures (in billions of francs of 1938 purchasing power) :

	Total	*Of which Central Government taxes on income and capital*
1938	66.6	24.2
1946	69.2	27.2
1947	69.8	27.3
1948	69.6	21.3
1949	83.5	25.1
1950	92.5	31.2

Source Etudes et Conjoncture, 1951, No 1, p 116

[2] In the budget proposal for 1951, extraordinary receipts of 20 billion francs (or less than 1 per cent of total receipts) are inscribed as the expected proceeds from an intensification of the fight against fiscal evasion.

[3] A Government agency, the *Cassa del Mezzogiorno*, was set up in 1950 with authority to spend 1,000 billion lire of public funds over a period of ten years on land reform, land reclamation and irrigation, the building of roads and waterworks and other special projects such as the development of the mountain regions and the development of tourist amenities

[4] There are already suggestions that fewer houses will be started in 1951 than in 1950 owing to lack of funds.

[5] Based on an estimate by Professor L Livi published in *Lettere d'affari*, 10 February 1951.

[6] *Relazione generale sulla situazione economica del paese* presentata dal Ministro del Tesoro alla Presidenza il 30 marzo 1951, p. 5.

[7] Estimate of total unemployment, open and concealed, given in the SURVEY for 1949, p. 68.

[8] For a detailed analysis of employment and unemployment statistics, see " Il mercato del lavoro in Italia nel 1950 ", *Rassegna di statistiche del lavoro*, 1951, No. 1, pp 60-70

It is easy to suggest ways in which wasted labour and wasted capacity [1] could be brought together and used to strengthen the foundations of the Italian economy. Nor is it difficult to suggest criteria for settling orders of priority between competing investment projects. Two criteria are indeed obvious. In a country where one of the most serious bottlenecks has always been energy and fuel it would be reasonable to concentrate on developing domestic energy resources. In a country where food consumption is low and where a large proportion of marginal income [2] is likely to be spent on food, one most urgent need is clearly to improve Italy's capacity to produce food. In a country where labour is abundant and labour mobility is low, there may also be a case for choosing those investment projects which are labour intensive.

If an attempt were made to apply these principles consistently there would be bound to be some interference with existing private interests. For private cost and social cost are by no means always identical ; thus, to a private entrepreneur, it is likely that it would seem more economic to build thermo-electric stations than to add to the number of hydro-electric stations which demand bigger initial investment even though their operating costs may be lower. From the social point of view, there can be no doubt that this is the less desirable alternative, particularly as Italy has to import most of its coal. It is not only within the sphere of domestic investment that the criteria mentioned above would have to be applied : some favoured schemes of investment abroad (for instance, the assisted settlement of emigrants) might seem luxuries in present circumstances.

But the acceptance of these precepts would itself be only a beginning of a serious attempt to remedy Italy's structural defects. If investment projects on a big scale were to be carried through without inflation, it would be necessary to take measures to prevent the marginal incomes thus generated from dissipating themselves in enhanced food prices ; this would imply either a massive increase in food supplies or the rationing of, at any rate, some foodstuffs. As, in the short term, marginal increases in Italy's supplies of food can be obtained only by increasing imports or diminishing exports (for example, of rice), a worsening of the balance of payments could be avoided only by vigorous screening of demands for imports or by an energetic export drive.[3]

The adoption of such measures of control, as well as a drastic reform of the system of direct taxation,[4] would be a revolutionary step in Italy. But, without such a step, it is to be feared that Italy will once more revert to its peculiar destiny of inflation combined with mass unemployment.

Western Germany

In 1951, western Germany will have to provide for increased occupation costs and for an increase in exports to offset a deterioration in its terms of trade. These additional claims upon its resources are hardly likely to amount to as much as 5 to 6 per cent of the net national income of 1950. If, as would seem desirable, the trade deficit were to be reduced by, say, two-thirds without a substantial cut in imports, an increase in exports equivalent to a further 2 to 3 per cent of the 1950 national product would be called for.

There is, on the face of it, no reason why these extra demands should impose a net burden on the German economy. In spite of the speed of the 1950 boom, western Germany remains one of the two or three European countries with substantial reserves of unemployed manpower and industrial capacity, and it was estimated in Chapter 2 that, if a lack of industrial materials did not hamper production, industrial output could be 20 per cent higher than in 1950.[5] This would, even if no allowance were made for any indirect effects on activity outside the industrial sector, give an increase in national income of at least 8 to 10 per cent.

[1] Published estimates suggest that the degree of utilization of capacity was, even at the end of 1950, only 60 per cent in plants making tractors, 50 per cent in factories making nitrogenous fertilizers and 65 per cent in the cement industry. These instances have been chosen for mention because of the obvious importance of these industries' products in any properly conceived investment programme for Italy ; equally striking estimates have been made for a wide range of industries It is to be suspected that the capacity figures used in most of the calculations include some obsolescent high-cost plants ; nevertheless, it would from the national point of view be economic to use them even though the private cost of so doing were high.

[2] The official estimate published in *Lettere d'affari*, 10 February 1951, p 67, is that expenditure on food is 64 per cent of total consumption expenditure. It is not likely that the marginal propensity to consume food of the lowest income groups, those most directly affected by an expansionist programme, would be less than this.

[3] Except, of course, to the extent that aid is received from abroad.

[4] On the imperfections of the present system of income tax assessment and collection, see the *Economic Bulletin for Europe*, Vol 2, No 3, pp. 62-3 and 65.

[5] An inquiry recently conducted among a sample of German enterprises gave similar results. The replies suggest that, assuming a sufficient supply of materials, industrial production could be increased in six months by 12 per cent at least above the peak end-1950 level See *I.F.O. Schnelldienst*, Munich, No. 47, 1950.

But it is clear that, unless radical changes in policy are made, there will be limitations—partly springing from inadequacies of past policies—on western Germany's power to supply these demands.

First, in spite of the high level of unemployment, labour is a scarce factor of production in some industrial regions. This is a reflection of the uneven geographical incidence of unemployment, which is mainly concentrated in the agricultural regions with large refugee populations. In order to reduce the unemployment rate of, say, Schleswig-Holstein (27 per cent) to the level prevailing in North-Rhine Westphalia (under 5 per cent) something more than a general increase in demand will be needed. Houses will have to be built, workers retrained and inducements will have to be offered sufficient to offset the inertia natural to refugees who have already changed their homes and occupations once.

Second, already during the winter of 1950/51 the expansion of industrial production was hindered by a shortage, not of imported raw materials, but mainly of domestically produced coal, electric power and steel. This reflects the fact, already commented on in Chapter 2, that the German expansion has been very uneven as between different industries. In March 1951, whereas the index of industrial production was 35 per cent above the 1936 level, coal production was only 10 per cent above, and the index for iron and steel still 17 per cent below, the 1936 level.

The lack of balance in the expansion can be explained by the lack of any coherent investment policy. In western Germany, the determination of the direction of investment has been left very largely to individual entrepreneurs. Those with profits to spare have been allowed to invest them as they wished ; by the offer of fiscal inducements they have been encouraged to reinvest them in their own enterprises. This policy might not have given bad results if all industries had been given an equal opportunity to earn high profits. But as the basic coal, power and steel industries were relatively unprofitable because their prices alone among industrial prices were controlled, confusion was made worse confounded. Fixed investment, at 20 per cent of total available resources, has been relatively high, but the shares of transport, mining, steel works, public utilities and agriculture in the total have been abnormally low.[1]

[1] For details, see Tables 24 and 25.

Thus, if the Government of western Germany is to get rid of its depressed areas it will, as is now generally admitted, have to assume considerably greater responsibility than hitherto for directing investment into channels where it can fructify for the benefit of the community. Specifically, it will have to press on with the building of workers' houses in the industrial regions, in order to increase mobility of labour, and to increase investment in the basic industries, so that the workers thus mobilized shall have materials to work on.

But though some benefits will result from this policy quite quickly, others will take time to show themselves and, in the meantime, if part of this increased investment is not offset by a reduction in other demand, there will, in the boom atmosphere prevailing in western Germany since events in Korea and given the likely increases in German exports, be some danger of a demand-induced inflation. If this is to be avoided, it is likely that there will have to be some restraint of the less essential types of investment and in the luxury consumption of the higher income groups, which flourishes as in few other countries as a result of high profits and low tax-morality.

The danger of a cost-inflation is also growing. Between December 1950 and March 1951 the cost of living rose by 6 per cent, largely as a result of earlier increases in import costs. The Government has recently decided to raise the controlled prices of basic materials and grain, with the dual object of stimulating economy in their use and of increasing the profitability of the industries producing them. When these rises take effect in June, there is bound to be a further rise in the cost of living, which can hardly fail to lead to demands for wage increases, particularly as real wages, though they have risen by perhaps 20 per cent since the monetary reform, have lagged behind total real income and consumption. It is difficult to see how a cost-inflation is to be avoided unless there is either control of prices and profits or heavier and more effective taxation of profits.

The situation in western Germany is thus highly complicated. A continuance of the undifferentiated credit restriction recently introduced would damp down demand and so reduce the danger of inflation from one source, but at the cost of making an orderly expansion of production more difficult in the future. On the other hand, to allow investment and consumption demands to continue uncurbed and to super-

impose on them an increase in investment in housing and the basic industries would strengthen internal inflationary pressures. To proceed with the price increases already decided on and not to be ready to grant offsetting wage increases would be to attempt to perpetuate a distribution of income that fits only a situation in which a large proportion of the population is unemployed.

It is seen that there are no simple remedies. What is needed is a highly differentiated policy which maintains and even increases the pressure of demand in certain fields and which simultaneously siphons off excess increases in other fields. This is likely to involve a much greater degree of conscious control of the working of the economic system than has been the practice since the monetary reform of 1948.

Scandinavia, Finland and the Netherlands

In each of the three Scandinavian countries, Finland and the Netherlands, the problem of inflation presents itself in a fairly similar way, although there are some important differences, both in the way in which the present international developments influence their economy and in their ability to resist the new inflationary forces. Besides a broadly similar institutional background, the main feature which these five countries have in common is their heavy dependence on foreign trade.[1] Consequently, changes in the level of prices in foreign trade are bound to have strong repercussions on the internal price level, and real national income may be heavily affected by changes in the terms of trade.

In September 1949, all these countries chose to devalue their currency to the same extent as sterling.[2] This decision was based on the assumption that export prices, whether they were fixed in long-term contracts or not, would not change much in terms of sterling. A large part of the trade of these countries is with the United Kingdom, the prices of their exports tend to be fixed in sterling, so that their terms of trade could not be expected to be heavily affected by the decision whether they should follow sterling or not ; nor could they expect a change in exchange rates to cause any considerable change in the volume of exports, which were largely determined by the development of production. Therefore, the decision to devalue to the same extent as sterling was based on considerations of internal distribution rather than of expected competitive advantages.[3]

Contrary to expectations, the price of forest products, the most important items among Swedish and Finnish exports, started rising shortly after devaluation, and the upward movement was further enhanced by the political events in 1950. This means, on the one hand, that Sweden and Finland are not, broadly speaking, faced with the problem of a reduction of available resources due to an unfavourable development of the terms of trade ; but it also means that the internal price level is pushed upwards both from the import and from the export side [4] and that the resulting shift to profit both stimulates wage claims and reduces employers' resistance to them. In Denmark and the Netherlands, exports consist overwhelmingly of animal food and industrial manufactures, whose prices have increased only little, if at all. The heavy deterioration of the terms of trade, together with the strong increase in imports after trade liberalization, has therefore led to a further increase in the already substantial balance-of-payments deficit of these countries. As regards the recent development of the terms of trade, the position of Norway is similar to that of Sweden and Finland (a moderate deterioration of Norway's terms of commodity trade being largely offset by rising freight rates) but, like Denmark and the Netherlands, Norway is faced with the necessity for reducing its very large balance-of-payments deficit.[5]

A substantial increase in military expenditure is envisaged in all the countries with the exception of Finland. The increase planned for the near future is particularly great in the Netherlands, amounting to some 3 per cent of present national income.

Thus, Denmark, Norway and the Netherlands have at one and the same time to cope with a strong upward push to prices coming from outside, the need to improve the balance of payments as foreign aid is reduced, and increases in military expenditure, the joint effect of which is a reduction of the rate

[1] See footnote 1, page 131

[2] In Finland, this devaluation was in addition to a depreciation by 16 per cent carried through in July 1949.

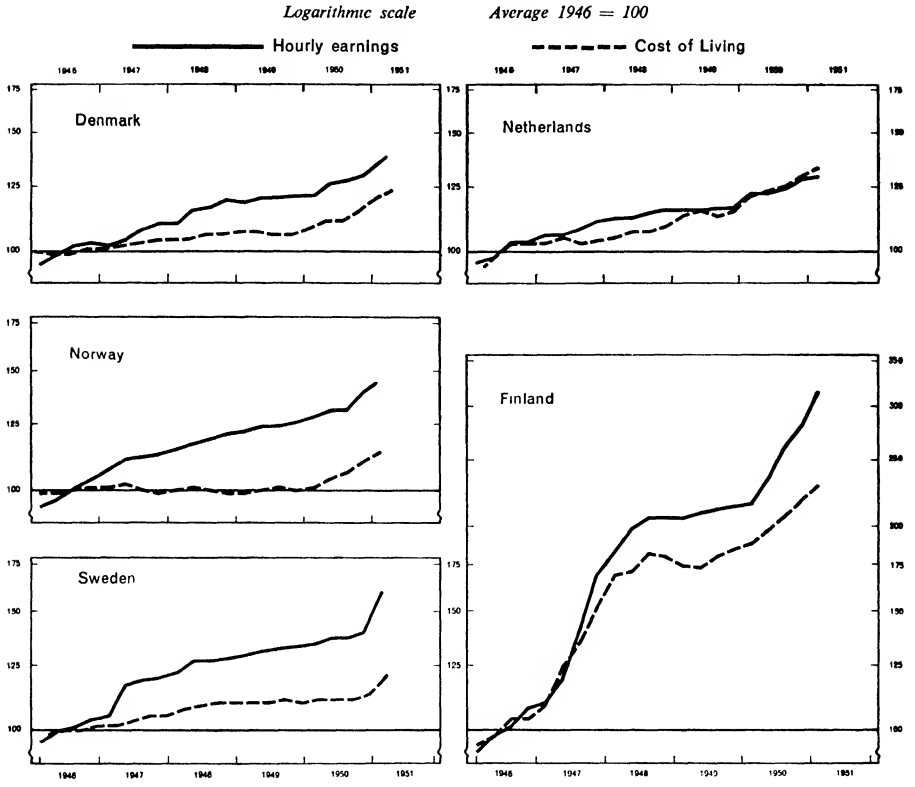
[3] In the Netherlands, considerations regarding the competitiveness of exports of finished manufactures were, however, at least as important. The same may have been true of Sweden.

[4] The internal effects of rising export prices have been somewhat damped by the introduction of export duties on timber, pulp and paper.

[5] It should also be remembered that, even without a deterioration of the terms of trade, the increase in the level of prices in foreign trade involves an additional burden for a country running a big deficit.

Chart 10

COST OF LIVING AND HOURLY EARNINGS IN SCANDINAVIAN COUNTRIES, FINLAND AND THE NETHERLANDS, 1946-1951



of increase in, or even of the absolute amount of, resources available for civilian use at home. In Sweden and Finland, on the other hand, the " real " position has so far not deteriorated significantly. But this in no way means that recent inflationary movements have been less serious in these two countries. In fact, they have been stronger.

In order to provide perspective for the most recent inflationary developments, the movements since 1946 of the cost of living and of hourly earnings in the five countries are shown in Chart 10. Three periods can be fairly clearly discerned. First, the years 1946-47, when the situation was one of heavy inflationary pressure. While prices and wages rose violently in Finland, in the other countries the inflationary pressure was prevented from heavily influencing the price level through a comprehensive system of controls. The year 1948 and the first part of 1949 were a period of approximate internal equilibrium ; controls were partly abolished and the price level remained stable. In Sweden, the stabilization was greatly helped by the negotiation of a two-year wage stop. Only in the Netherlands did consumer prices rise considerably in this period, owing mainly to the abolition of subsidies, and real wages fell. The third and most recent period of steeply rising prices and wages

started shortly after devaluation in Denmark, Finland and the Netherlands, while in Sweden the effects of devaluation were delayed by means of subsidies. These were abolished at the end of 1950, and, at the same time, free wage bargaining was resumed after a period of agreed wage freeze. The resulting wage increases in Sweden amounted to about 15 per cent on the average and, since the beginning of 1951, the price level has been rising rapidly. In Finland, a period of about one year of relative stability was interrupted by the devaluation of the Finnish mark in July and September 1949, and the new inflationary movement gained momentum in the beginning of 1950 when Government control of wages was abolished. During the following year, up to the beginning of 1951, money wages rose by some 50 per cent. In May 1951, agreement was reached on a five-month price and wage stop to serve as a breathing-space for the elaboration of a more lasting stabilization policy.

In Norway, as can be seen from the chart, the cost of living was kept completely stable during the whole period from 1946 to the spring of 1950. The price of this policy was the maintenance of a more pronounced inflationary pressure than in the other northern countries, but it did, at the same time, lay the foundation for an agreed all-round stabilization of the level of incomes. The price increases following devaluation could have been prevented from affecting the cost of living only by a considerable further extension of the payment of subsidies, which would have seriously enhanced the inflationary pressure from the demand side, since it could hardly have been fully covered by direct taxes, which are already high. The policy of strict price stabilization therefore had to be abandoned in March 1950 and a period of compensatory adjustment of wages and agricultural prices was opened. By March 1951, the cost of living had risen by 15 per cent.

The recent experience of the five countries here considered thus provides ample evidence of the inherent difficulties, in countries pursuing a policy of full employment, of maintaining monetary stability. Multangular agreements on a stabilization of prices and income have proved to be possible, but only for limited periods, and only as long as the price structure is not disturbed by a push from outside.

While the avoidance of a price-wage spiral remains the chief task for economic policy in these countries, the generally prevailing inflationary climate has also necessitated the introduction of new measures designed to check excessive investment demand. In all these countries, except Norway, discount rates were raised in the latter half of 1950. However, with the exception of Finland, commercial banks are extremely liquid and the rise in discount rates alone could not be expected to have much influence on the amount of bank credit. Legal reserve requirements have therefore been raised so as to give the central banks a closer control over commercial banks. Credit restrictions appear to have been heaviest in Finland, Denmark and the Netherlands. In the two latter countries, this is a departure from the policy of cheap money hitherto pursued. In Norway and Sweden, more reliance has been placed on fiscal weapons to curb investment. In Norway, this has taken the form of a suspension of tax-free allowances for repair work. In Sweden, a tax on investment has been introduced ; this contrasts vividly with the formerly exceptionally liberal attitude of the Swedish tax authorities towards investment. In addition, plans for curtailing public investment have been announced in Norway and the Netherlands, and in Denmark the financing of residential building by loans from public funds is being cut down.

In Denmark and Sweden there has been considerable discussion as to whether a revaluation of the currencies might be an appropriate method of damping the inflationary tendencies. Since no significant improvement in the terms of trade could be expected to result from an isolated revaluation in these countries, the case for a revaluation lies exclusively in the effects of lower import and export prices on the internal price level and the distribution of income. Although it is clear, in the light of subsequent events, that at least some of the countries which followed sterling devalued to a larger extent than necessary, it is not certain that the process can be reversed through a revaluation. For the whole group of countries considered here, the main difficulty in this respect is that a high degree of inflation of the internal cost and price level has already been allowed to take place. Although the gap between external and internal prices has not yet been bridged, there is a danger, as long as the inflationary process is still going on, that an appreciation by one or two countries in isolation might seriously threaten the balance-of-payments position by enhancing import demand. In the case of Denmark—and perhaps the Netherlands—the liberalization programme appears to be threatened

even under existing exchange rates.[1] Rather than as a primary instrument of checking inflation, a revaluation, therefore, appears to be a method by which an internal stabilization, once achieved, could be further supported.

The United Kingdom

The Government of the United Kingdom is planning to spend £4,700 million on defence in the next three financial years (April 1951 to March 1954). It is officially estimated that over one-third of this sum, £1,700 million, will be spent on the products of the metal-using industries. The programme appears to have been conceived as a single programme stretching over three years rather than as the sum of three annual programmes. There is thus no financial ceiling set for the first year, and the amount which will be spent depends entirely on the degree of priority which manufacturers are instructed to give to defence orders and on the capacity of the British engineering industry to fulfil those orders, given the priorities set. The Government's own provisional forecast is that £1,350 million[2] will be spent in the financial year 1951/52 and rather less in the calendar year 1951. This represents an increase of £485 million over the amount actually spent during 1950 or, after allowance for price changes, about 3½ per cent of the gross national product of 1950.

The extra cost of buying the same volume of imports as in 1950 is thought to be about £700 million, but it appears to be the official view that some £500 million of this will be covered by rises in export prices and increases in invisible earnings. The extra cost of maintaining imports at the 1950 level and of the new defence programme together amounts to about 5 per cent of the gross national product of 1950.

Some part of this can be offset by forgoing a surplus on the balance of payments. The extra claims on the gross national output in 1951 after taking account of this relief add up to about £375 million at average 1950 prices. How much that output will be is a very uncertain question. It was estimated in Chapter 2 that, on the unrealistic assumption that raw materials were available in adequate supply, industrial production could be 7 per cent higher in 1951 than in 1950. What it is in fact likely to be is bound to be a matter of guesswork. Quite apart from the world shortage of certain raw materials, the United Kingdom faces a considerable problem of re-allocation of manpower between one industry and another and, within the engineering industries, between civilian and military production. The delays involved by re-tooling and the bottlenecks in small components are impossible to foresee. The official estimate is an increase in industrial output of 4 per cent in 1951 ; this would imply a rise of about 3 per cent, or £325 million at average 1950 prices, in the total gross national product.

On the basis of these estimates, the gap to be covered by a reduction in consumption or investment is therefore of the order of £50 million at 1950 prices. If the whole of this were concentrated on consumption, as appears to be contemplated, the resulting fall in volume would be little more than half of one per cent. This is certainly well within the margin of error of the figures.

If the United Kingdom can maintain the volume of its exports at the end-1950 rate and can finance a small deficit on its balance of payments on current account, the problem of re-allocation will thus be so to arrange things that the volume of consumption can be kept stable. Stated in this way, the problem does not seem too difficult : for several years the British people have been accustomed to see their consumption rise by much less than the national output, and the problem of holding inflationary pressure in check is one that has been fairly well solved by a combination of fiscal and administrative measures.

But this neglects several facts. First, the increase in defence expenditure in 1951 is not intended to be a once-for-all increase ; there will be further rises in 1952 and 1953, so that, even if the terms of trade become no more adverse, the margin for increases in enjoyable or productive expenditure out of the extra product will still be narrow The fact that the problem of depriving people of the enjoyment of their extra output may continue for several years makes it the more important to ensure that the loss is equitably distributed.

Second, the fact that the statistical abstraction called the total volume of consumption may not

[1] Since the recent prolongation of the bulk purchase contracts with the United Kingdom, giving only minor price increases, an isolated revaluation in Denmark is hardly a practical proposition. In the case of a revaluation of sterling followed by the Danish krone, the position might look somewhat different. The raw material costs of agricultural exports in terms of Danish currency would decline while export prices would remain constant. There might thus be a case for a somewhat greater revaluation of the Danish krone than of the pound sterling.

[2] Not including stock-piling, which is, however, included in the figures in Tables 66 and 67.

have to be changed much is less important than the certainty that the distribution of consumers' expenditure as between different commodities will have to be significantly altered and that consumption of certain types of goods will have to be severely reduced. In some cases this reduction will be necessary because of competing defence demands for the materials used in their manufacture—household utensils and radios are obvious examples. In other cases, the reduction will be necessary because of a world shortage of raw materials or desirable because of the need to provide exports to compensate for the likely fall in exports of engineering goods. Textiles and clothing provide the most important examples in this category : the particular case of clothing is so important that it may very well prove essential, in the interest of equitable distribution and in order to hold price increases in check, to re-impose rationing.

Third, a foreign irritant has been lodged in the body of British prices by the rise in import costs. As long as the present level of exchange rates is regarded as given, the Government could expel the irritant only by increasing subsidies on imported goods. This would in itself have an inflationary effect unless it were offset by increases in taxation over and above the extra taxation called for to cover increased defence needs. In the event, the decision taken by the Government was that increases in import prices should be passed on to retail prices. Indeed, the decision was to pass on even more than the external rise, since domestic farm prices were raised without any offsetting increase in food subsidies.

The 1950 budget therefore introduced only comparatively minor adjustments between different classes : income-tax rates on the middle and higher incomes were raised somewhat ; old-age pensioners—the most depressed class—were promised a small but delayed rise in their money income ; taxes on company profits were raised (the increase being arranged in such a way as to discourage increases in dividends); the duty on petrol was increased; business was warned that the heavy initial tax-free depreciation allowances were to be suspended in 1952 [1] ; and some small economies were made in expenditure on the national health service. It is a striking example of the reliance placed on fiscal policy for directing the use of resources that, even without any increases in tax rates, the budget would, on the strictest possible definition of income and current expenditure, have shown a surplus of £86 million.

The really significant thing, however, was not so much the detailed changes as the implied major premise that it was expedient and possible to allow retail prices to increase sufficiently to absorb increased costs and to prevent wages from rising to the same extent. The increases apparently assumed in the British *Economic Survey for 1951* are here set side by side with the increases which had actually occurred by March 1951 :

Percentage Increases over the Average Levels of 1950

	Assumptions implied in the Economic Survey for 1951	*Actual increases up to March 1951*
Wages	7 *a*	5½ *b*
Retail prices . .	7½ *c*	5 *d*
Import prices . . .	28	28
Export prices	18½	12

a Average wage-cost per unit of output
b Index of wage-rates
c Increase in the average price of all consumers' goods and services
d Increase in the interim index of retail prices

The optimism of the official forecasts emerges clearly from a comparison of the two sets of figures. The two underlying assumptions are evidently that import prices will flatten out—that is, that inflation outside the United Kingdom will subside—and that, given this stabilization, cost inflation in the United Kingdom can be held within fairly narrow limits.[1] The analysis of the situation in the United States and the primary producing countries in Chapter 1 throws doubt on the plausibility of the first assumption.

The second assumption is equally questionable. In the earlier discussion of section 1 of this chapter, the general observation was made that neither the vertical transmission of increases in import prices to consumer prices nor the horizontal communication of price increases to commodities with low import content had yet worked itself out in most countries. This is certainly true of the United Kingdom. Nor can the recent increases in the wages of workers in a wide variety of industries yet be fully reflected in retail prices. There can be small doubt that, even

[1] The history of these initial allowances is curious. They were raised from 20 to 40 per cent of the cost of new investment in plant and machinery in 1949, when there was no apparent need to stimulate investment demand Now that they are to be suspended, business-men have been given a year's notice It would seem possible that, unless there is some restriction of credit, this may encourage entrepreneurs to do all they can to bring forward their investment plans in the current year and so increase inflationary pressure in the current year.

[1] Since this was written, official indices of retail prices and import prices in April 1951 have been published. They show rises over the average 1950 level of 7 and 36 per cent respectively.

should import prices rise no further, the rise in the cost-of-living index is bound to be very considerably greater than was apparently assumed when the *Economic Survey for 1951* was written.

A rise in the cost of living much above the present level could hardly fail to stimulate a second round of wage increases. Between June 1947 and September 1950, wage-rates actually lagged behind the cost of living, rising by only 10 per cent as compared with an increase of 14 per cent in retail prices.[1] But the moderateness of this rise must be attributed almost entirely to the heed paid by trade unionists to the Government's appeals for restraint in wage demands at a time when real income was rising. It represented a surprising success for the Government's policy of moral suasion, which collapsed only in the autumn of 1950. But now that costs and prices are on the move the United Kingdom may prove more vulnerable to cost-inflation than some of the other countries discussed in this section. Wage claims are filed separately by individual trade unions, and the danger that competitive sectional bargaining for wage increases may set up a vicious spiral is thus ever present.

4. Foreign Exchange Policy and the Inflation Problem

The preceding analysis has shown the limitations of domestic policy in controlling inflationary forces when they are as strong as those now threatening to undermine monetary stability in most European countries. These limitations are particularly serious in some countries which, for reasons bound up in their historical development, are inadequately equipped with fiscal and other devices appropriate to deal with inflation in any form. But the main reason for the insufficiency of domestic measures alone is that present inflationary forces are global and hence, for any one European country, largely external, transmitting themselves chiefly through the great rise in the prices of raw materials imports and, generally to a lesser extent, through the effect of increased foreign demand on export prices.

While the rise in import prices is the most direct inflationary influence from the outside, the fact that, in most countries, they have risen much more than export prices presents an additional serious burden. The increase in import prices compared with export prices means either that European countries must find additional ways of financing balance-of-payments deficits at a time when, as indicated in Chapter 4, the means of financing appear more likely to decrease than to increase, or that they must export larger quantities at a time when the demand for armaments is beginning to claim a larger share of production. The burden may also be lightened by letting European export prices rise, and, in so far as any policy has emerged, this seems to be what is contemplated. But to let export prices rise is also to let inflation in European countries proceed, stimulated both by the additional incomes generated in the export industries and the inter-acting effect of price increases in European countries' intensive trade with one another.

Given the inability of domestic policy to compensate for external price developments, an obvious and necessary question is whether the direct link between domestic and external price levels should be severed by appropriate adjustments in exchange rates. More specifically, the question is whether, by appreciating their currencies, European countries could lower the level of foreign trade prices in terms of their own currencies and perhaps also alter to their advantage the relationship between export and import prices. A strong presumption in favour of this possibility is established by the very results of the currency devaluations of September 1949 : if, as happened then, foreign trade prices rose in terms of devalued currencies, and import prices rose much more than export prices, there is reason *a priori* to suppose that the opposite effects on prices could now be obtained by reversing the process.

It would, however, be grossly erroneous to regard an upward revision of European currencies now as merely a reversal of the earlier devaluation process. There is a fundamental difference both in the relevant objectives of exchange rate policy at this time and in the world market situation. In 1949, the main objective was to improve the balance of payments, while the effects on prices, involving a deterioration in the terms of trade, were regarded as the necessary means to a solution of Europe's then overwhelming dollar problem. At the present time, it is the price effects which are directly important.

[1] Over a similar period—April 1947 to October 1950—average earnings rose by 24 per cent, as a result mainly of inter-industry shifts and increases in productivity reflected in higher piece-work earnings.

But, because of changes in supply elasticities, the relation between price changes and the balance of payments is probably completely reversed. Through an appreciation of currencies, Europe may now very well succeed both in forcing down import prices and in improving its balance of payments at the same time.

The Changed Situation since Devaluation

Two points must be borne in mind in considering devaluation and the reasons which may now make a change in the opposite direction desirable : one is that devaluation was undertaken to meet a particular situation which, contrary to expectations at that time, proved to be extremely short-lived; the other is that it was to a large extent hastily improvised and experimental.

The devaluation of the pound sterling and various western European currencies in September 1949 was justified by the need to put exports on a more competitive footing compared with the United States by removing price disparities which hampered European exports to unrestricted markets. The need for such an adjustment was rendered particularly acute by the softening of demand overseas and the apparent return of a buyers' market following satisfaction of accumulated demands after the war, although it became clear only a short time afterwards that these conditions were largely the result of the temporary industrial recession and extensive inventory liquidation in the United States accompanied by a fall in demand elsewhere. These conditions were reflected in a decline in European exports and, even more, in the exports of the overseas sterling area and other primary producing countries to the United States. At the same time, there developed a strong speculative movement against the pound in the summer of 1949 which was largely responsible for the size and rapidity of the United Kingdom's gold and dollar losses at that time and had considerable influence on both the timing and the extent of devaluation. In this atmosphere of crisis and speculation, the new rate for the pound sterling was placed at a level which, as indicated in official statements at the time, was deemed sufficiently low to ensure that any further speculation would support rather than weaken the pound, but was not apparently the result of any close calculation intended to equalize British and American export prices.[1]

The new rates for other European currencies which were devalued along with sterling were based still less on any close estimate of their previous overvaluation with respect to the dollar. The main European suppliers of food and raw materials to the United Kingdom—Ireland, the Netherlands and the Scandinavian countries—more or less automatically followed sterling in a 30 per cent devaluation, mainly because their export prices were largely set in sterling, whether by long-term contract or otherwise, and were not expected to increase. Their rates on sterling were therefore kept unchanged in order to avoid losses for exporters, the expected terms of trade burden caused by the devaluation of sterling being thereby, it was supposed, equally distributed among all parts of the population. The currencies of the main industrial competitors of the United Kingdom, which had been subject to less dramatic speculative pressure than the pound, were devalued to avoid undue impairment of their competitive positions, but to a lesser extent than the pound, despite the fact that there was little evidence, if any, that these differential rates were justified by the comparative levels of export prices.

From the analysis given in Chapter 4, it is evident that the changes in trade and payments since devaluation have been far greater and more rapid than anyone could have expected or than could be attributed to devaluation alone. The great upsurge in world demand brought a rise in the exports of all European countries, whether devaluing or not, and in most instances some improvement in their balances of payments. A closer inspection of the changes which have occurred within this over-all expansion, has, however, revealed a large and consistent shift in the share of the export market for manufactures to the advantage of those countries which carried out the more extensive devaluations, although in the particular case of the United Kingdom the conclusion was reached that, apparently because of the pull of home demand, the shift was small in

[1] " In arriving at the figure, we had to examine the competitive level of prices for our imports into the dollar countries and other countries where they competed with dollar goods, the rate at which ' cheap ' sterling was in fact being dealt in in various countries and markets, and the general expectation of the rate that was likely to be fixed if and when we made an alteration. . . . Finally, it was necessary to make it absolutely plain that this was not a tentative first step, but a final and completed operation. We had to convince the world and our own people that we had without doubt gone far enough. I think in that we have succeeded." — The Chancellor of the Exchequer, 27 September 1949. See " Hansard " Fifth Series, Vol. 468, cols. 21-22.

relation to its already large share in world markets and in relation to the extent of British devaluation.

Price developments since devaluation, as examined in Chapter 4, have also been rather different from what might have been expected. Up to the middle of 1950, the rise in the import prices of devaluing countries was, on the whole, relatively moderate, chiefly because the export prices for both manufactures and most primary goods in devaluing countries proved to be relatively sticky ; prices of exports from the dollar area had, however, failed to soften further, as might have been expected because of devaluation elsewhere, and in many instances they were considerably higher than they had been in 1949. After the middle of the year, the prices of virtually all goods moving in international trade, whether from dollar or non-dollar sources, responded to the intensification of demand and began to rise rapidly. As seen in Chapter 1, raw material prices had increased in the course of 1950 by about 80 per cent in terms of the prices of manufactures.

Because of these developments in the second half of 1950, Europe is now faced with a world price and market situation wholly different from that which prevailed or could be foreseen at the time of devaluation. The great upsurge in raw material prices not only provides the need for an appreciation of European currencies as a means of countering these price changes, but also the opportunity to take this step without damage to the balance of payments. The appraisal of the market situation resulting from the analyses given in previous chapters contains three essential elements.

First, the foreign exchange earnings of overseas primary producing countries, derived from their exports to Europe and North America, will be some $3 to $4 billion greater in 1951 than in 1950, if primary prices taken as a whole remain at the average level prevailing at the end of the year.

Second, the United States is unlikely to provide exports of manufactures sufficient to meet very much of this increased demand, because of raw material shortages, priorities assigned to defence production, cuts in civilian production, and the generally inflationary development in the American economy tending to reduce exports and increase imports. At the same time, these conditions in the United States produce a greatly increased demand for European goods of all kinds, including not only finished manufactures, but also industrial materials such as semi-finished metal goods and basic chemicals.

Third, the ability of European countries to supply greatly increased exports in response to the larger demand overseas will tend to be limited by much the same factors as those affecting United States exports, even though defence production has not yet begun to claim the same share of output in most western European countries as it does in the United States.

This change in the market situation is the crucial point in the analysis which the present SURVEY offers of recent and prospective developments in Europe's external relations, and the crucial point also in considering a possible appreciation of European currencies. Much, therefore, depends on the validity of the three points summarized above. A collapse of raw material prices would, of course, completely alter the outlook, but the recent declines in the prices of certain key commodities—rubber, tin and wool—have done little more than wipe out the additional increases which had been registered after the end of 1950, and even a further weakening may be outweighed by the more gradual but broader upward movement which has been imparted to primary prices in general. The second point, the ability of the United States to supply increased exports at this time, is also of critical importance in the analysis, since a substantial rise in European export prices through currency appreciation would have unfavourable consequences if the United States should prove, in fact, able and prepared to supply much larger quantities of manufactures at about present price levels. A very great increase indeed would be necessary, however, both to meet the rise in foreign demand and to displace part of the existing volume of European exports to overseas countries, and the analysis of the United States position given in Chapter 1 leads to the view that this is unlikely to happen.

As far as prospective European exports to overseas countries are concerned, it is not merely a question of whether substantial further increases are possible or likely, but also whether a rise in the volume of such exports is the most desirable way of meeting the current situation. The essential point of the present analysis boils down to the contention that present relative prices of raw materials and manufactures are completely out of line with their relative scarcities. Such a disparity always tends to develop in a period of rapid inflation of prices, because of the greatly

different conditions under which primary goods and manufactures are produced and sold. In the case of most primary goods, an excess of demand over supply is immediately reflected in a rise in prices, while in the case of manufactures it is more typically reflected in lengthening order books and increased delays in delivery. Nevertheless, prices of manufactures will catch up in time in response to both rising production costs and increased demand. The question is whether it may not be preferable to try to cut this process short by currency appreciation, holding domestic price levels as stable as possible, rather than by the vastly more disturbing process of letting internal inflation in Europe run its course. This question must be considered in the light of the likely practical consequences of currency appreciation.

The Probable Results of Currency Appreciation

The consequences of a change in relative currency values, as already seen in the analysis of price movements after devaluation,[1] depend in part on the size of the currency area concerned. In the present context, currency appreciation needs to be considered as a concerted action by western European countries generally with respect to the dollar. There would, of course, be exceptions, including countries traditionally endeavouring to hold fast to that fluctuating standard of value which is gold, and, at the other extreme, countries where inflation is already so far developed that currency appreciation could confer at best only a passing benefit.

On the other hand, it must also be assumed that many overseas primary producing countries would join in an appreciation of currencies, particularly those which have strong monetary ties with European countries, just as most of the overseas sterling area followed the pound sterling in devaluation.[2] The probable extension of currency appreciation to include overseas primary producing countries might appear to render nugatory the expected benefits to European countries, since the very purpose of a change in exchange rates would be to lower primary prices in terms of their own currencies. This, however, would not be true, as will be apparent from the following analysis of the probable effects on European import prices.

The essential fact is that, merely by its size as a producer and consumer, the dollar area is itself a major force in determining the prices of many primary goods in international trade and, to the extent that these prices remain stable in terms of the dollar, they would fall in terms of those currencies which appreciated in relation to the dollar. These goods include, first of all, those of which the dollar area is itself a major supplier and consumer, among the most important being cotton, tobacco, grain, timber, sugar and, again in 1951, coal. Since the volume of these goods exported to Europe is now directly controlled to a large extent, either by export allocations on the one side or by import restriction on the other, there is no reason to suppose that their dollar prices would rise to any significant degree whatsoever in response to currency appreciation in Europe. Very much the same would be true also of manufactured goods exported by the United States to Europe. Thus, on the total amount of European imports from North America, which in 1950 still made up more than one-third [3] of Europe's imports from all overseas sources, dollar prices would not be greatly influenced by the increased buying power of European currencies (although they may continue to rise for other reasons) : prices in terms of European currencies could therefore be expected to fall by almost the full amount of the appreciation.[4]

Next, there are a number of important commodities in international trade of which the dollar area is a major consumer and a net importer, including rubber, wool, tin, copper and other non-ferrous metals, cocoa and coffee. Several of these commodities are produced chiefly in overseas areas which, as noted above, might be expected to follow the lead of European countries in currency appreciation. The prices of most of these commodities have risen, however, far above production costs : they are purely scarcity prices reflecting the fact that demand has increased much faster than production. Costs of production are therefore largely irrelevant in determining how currency appreciation would affect export prices, and it is essentially the effect on demand in the major consuming centres which matters—specifically, the relative importance of demand in western European

[1] See section 1, Chapter 4.

[2] A revaluation of the Australian pound has, in fact, been more widely discussed than the possible revaluation of the pound sterling.

[3] Including imports from Cuba and Mexico.

[4] Prices of similar goods supplied from other sources might also show some sympathetic decline, although this influence would tend to be limited at present because of the interference of export allocations and bulk purchase contracts or administrative controls with the functioning of a free market.

countries which might appreciate their currencies, compared with demand in the United States and elsewhere. In most instances, the latter is very much greater than the former,[1] and it would therefore seem that dollar prices of these commodities would tend to remain stable or rise only moderately, while a substantial decline in terms of European currencies could be expected. This should also be true of petroleum, although it is not among those products which have increased greatly in price since Korea : there is little reason to suppose that its dollar price would be significantly affected by currency appreciation in Europe, in view of the fact that the United States alone accounts for almost 70 per cent of world consumption outside the Soviet Union and eastern Europe. It nevertheless represents roughly 15 per cent of total European imports from overseas countries, and a fall in its price in terms of European currencies would therefore be of substantial benefit.

Many other commodities important in European imports are, on the other hand, much less influenced by price levels in the dollar area than the two main groups of products which have so far been discussed. These commodities, some of which are mentioned in the price analysis given in Chapter 4, are not in the main traded extensively between the dollar area and other areas, and in a number of instances their prices are administratively determined or regulated by long-term purchase agreements. Their prices are not greatly affected, at least in the short run, by changes in either direction in exchange rates between European currencies and the dollar, and currency appreciation in Europe, therefore, would not tend to produce any considerable benefits in the form of lower prices for this important group of commodities. It is also true, however, that these particular goods have, for the most part, risen much less in price in recent months than those goods which are particularly dollar-sensitive for reasons analysed above.

The net benefits of currency appreciation in Europe in the form of lower import prices are therefore seen to depend largely on the relative importance of the dollar area and other areas as producers and consumers of the many different products entering into international trade. On balance, it can be estimated that the fall in the average level of Europe's overseas import prices would be roughly two-thirds as great as the percentage reduction in European rates on the dollar corresponding to a given degree of currency appreciation. In other words, if the rates on the dollar were brought down by 30 per cent, overseas import prices would fall by something like 20 per cent on the average, and smaller or greater changes in the exchange rates would have a smaller or greater effect in reducing import prices [2]

It thus appears that currency appreciation, depending on the degree, could provide considerable relief from the great rise in import prices, and that the decreases envisaged would centre to a large extent on the commodities which have recently shown the most extreme price increases precisely because they are the ones most sensitive to the dollar market. This, it may be noted, would not only benefit European importing countries, but would also be of some advantage to overseas supplying countries whose currencies might likewise be appreciated . a fall in the prices of these goods in terms of their own currencies, while reducing their present extraordinary gains on terms of trade, would serve at the same time to diminish the inflationary pressures, described in Chapter 1, which they are now experiencing.

With regard to the behaviour of the export prices of European countries in the event of currency appreciation, it is, paradoxically enough, a matter of some indifference, under present conditions, whether they remain stable in national currencies or decline. There is some gain either way . in so far as they remain the same, Europe's success in offsetting the deterioration in its terms of trade would be maximized; in so far as they fall, relief is experienced from the export sector as well as from the import sector in combating inflation. The latter may happen in the case of some European-produced industrial materials and perhaps also in that of textiles ; but, in general,

[1] See Table 38 for the share of the United States in the consumption of most of the products mentioned It should further be noted that, for some of these products (rubber, wool, and non-ferrous metals being the most important) demand for defence production and stock-piling is a relatively large and inelastic part of the total, and in these instances it is the relative magnitude of civilian demand in the two areas which is decisive in determining the price effects of currency appreciation in western Europe.

[2] This estimate (and also that given below with respect to imports from European as well as overseas sources) is based on the general principles stated in the text, and a detailed examination of the probable movements of prices, as a consequence of revaluation, of 20 major commodities representing some two-thirds to three-fourths of the total imports from all sources of the principal western European trading countries, account being taken both of the share of these countries (and that of their affiliated overseas areas) in world production and consumption and of institutional factors which, as previously noted, may be expected to exercise a special influence on price behaviour.

export prices would probably tend to remain relatively immobile in national currencies,[1] just as they did, in opposite circumstances, for a considerable period after devaluation until the general impact of post-Korean developments began to be felt.

Since European exports also enter heavily into the imports of most European countries, their expected price behaviour would tend to reduce the average fall which any one European country might expect to obtain in the prices of its total imports, including those of European origin, as compared with the decrease in the overseas import prices of European countries taken as a group. The over-all decrease in import prices for any one European country (as a member of a larger group of countries appreciating their currencies) would probably be about half of the percentage reduction in its exchange rate on the dollar corresponding to the degree of appreciation.

So far, this analysis of the likely results of currency appreciation has been concerned mainly with the effects on import and export prices. It has already been suggested that—because of the fundamental shift from the buyers' market of 1949 to the sellers' market of the present—these price changes would not impair, but would rather improve, Europe's balance-of-payments position with overseas countries and particularly with the primary producing areas, where the increase experienced in Europe's deficit in 1950 threatens to become still greater.[2] With the existing shortages both of raw materials on the one hand and manufactured goods on the other, there is little reason to believe that the decrease in European import prices which currency appreciation would bring about would lead to a significant increase in the value of imports; nor does it seem likely that the increase in European export prices in relation to the dollar [3] would reduce significantly the volume, let alone the value, of European exports. It must be remembered that metals and engineering products and chemicals account for about 55 per cent of Europe's overseas exports, and textiles for a further 25 per cent; all these are products for which the necessary raw materials are short and for which there are many competing demands. Even a considerable increase in Europe's export prices in terms of dollars and an apparent weakening in its competitive status with the United States should not, therefore, involve any very considerable difficulties in marketing the bulk of European exports. Nor, indeed, would some decline in the export volume, if it did occur, be unwelcome in existing circumstances, if the total foreign exchange proceeds could nevertheless be increased to compensate in part for the great losses incurred through the rise in import prices. In the longer view, the greatest loss from currency appreciation might be that some of the extraordinary opportunities now presented to develop export footholds in the difficult United States market would be lost; such losses might be regretted when present exceptional demand conditions no longer exist.[4] In the near future, however, currency appreciation is much more likely to increase than to diminish Europe's aggregate dollar earnings, both in the United States itself and in markets in Latin America or elsewhere which have dollars to spend beyond the capacity of manufacturing countries to supply.

The Strategy of Exchange Rate Policy

The successful employment of foreign exchange policy as a weapon in meeting the stresses and strains now experienced by European countries is subject to two main conditions. One of these is that foreign exchange policy should be flexible. This means, not indeed that exchange rates should or would vary from day to day, but simply that the possibility of varying the rates should be ever present; that is, the monetary authorities should be able and willing at any time to adjust the rates, by use of the resources at their

[1] This assumes, of course, that inflationary forces of domestic origin would be successfully restrained, otherwise, export prices would continue to rise despite currency appreciation

[2] For Continental European countries, an improvement in the position with respect to overseas primary producing countries would be reflected largely in a decrease in the surplus position of the sterling area in the European Payments Union (that is, in smaller drawings by E P U. on the United Kingdom's quota and smaller gold transfers by E P U to the United Kingdom) For the United Kingdom itself, the improvement would be reflected largely in a slowing-down in the rate of accumulation of sterling balances by overseas members of the sterling area

[3] In other words, assuming that European export prices in terms of their appreciated currencies remain about the same as at present.

[4] While exports of many types of goods to the United States might be further expanded and more firmly established in the American market, it would be wrong to assume that this applies equally to many of the commodities now accounting for much of the increased volume of sales. For example, the export of French industrial alcohol to the United States, mentioned in Chapter 1, is clearly of an emergency nature, growing out of the surplus stocks accumulated in France and the expansion of synthetic rubber production in the United States, a subcommittee of the United States Senate investigating the stockpiling programme has recommended that the United States should free itself from dependence on outside sources for industrial alcohol.

command, in either direction and to whatever extent seems appropriate.

The necessity for a flexible foreign exchange policy arises for several reasons : the difficulty in appraising closely the present world market situation and in estimating the degree of currency appreciation appropriate to this situation, the possibility that the prices of raw materials and other primary goods may continue a long upward movement or may level off and even recede, and the great uncertainty as to how long the period of international political tension and rising military expenditure will last and what the aftermath will be.

It is because of this instability in the underlying situation that the whole of the preceding discussion has been in terms of currency appreciation rather than " revaluation ", since it would be a mistake once more to attempt to establish fixed exchange rates in a fluctuating world economy.[1] It is now clear that the endeavour to set rigid exchange rates immediately after the war, before a sufficient degree of stability had developed in world production and trade, unnecessarily deprived European countries of ready access to one of the most useful means of adjustment between their domestic economies and external conditions, and that, at the time of devaluation in 1949, they failed to take advantage of the opportunity then provided to initiate more flexible policies. Maintenance of exchange stability presupposes that there is also a reasonable stability in basic economic conditions.[2] Exchange stability ceases to be a virtue when it becomes a means through which the shock of price and income fluctuations abroad is transmitted to the domestic price and income structure. Maintenance of fixed exchange rates is, after all, only one form of currency stability and is scarcely to be preferred over stability in terms of the buying power of money over goods. When confidence in currency stability in the latter sense is destroyed through progressive inflation, the very possibility of orderly and sustained economic progress is seriously impaired, as the experience of France and Italy in recent decades tends to bear out.

The possibility that, at some unforeseeable time in the future, world economic conditions may change in such a way as to necessitate a downward revision of European currency values is an argument in favour of a flexible exchange policy – not an argument against an increase in the exchange values of European currencies at this time. The need for an eventual depreciation of currencies will not be any the less if European countries go through the painful experience of price inflation in the meantime than if, with the aid of currency appreciation, they succeed in stemming inflation now. The end result would be the same. The difference is that, in the absence of a more flexible exchange rate policy, changes always tend to be in one direction – downwards. This must be so if, in time of economic boom like the present, countries permit inflation to proceed and, being unable to force down their general price and wage levels later, are compelled to make the necessary adjustments to a less prosperous world market by depreciating their currencies.

Confidence in the value of money would be far better maintained in the long run if experience might show that currencies could move up as well as down as part of a policy designed to maintain internal monetary stability. As it is, the premature fixing of exchange rates has played quite unnecessarily into the hands of speculative forces. Since exchange rates are adjusted only reluctantly and after great cumulative pressures have built up, speculators can know with confidence that exchange rates are likely to move in only one clearly foreseeable direction. It does not require much foresight to see that, if inflation is allowed to continue in Europe, speculation against European currencies will again develop at some future time when world prices turn downwards.

A more flexible exchange policy can be conducted so as to combat and out-manœuvre these speculative forces, since the monetary authorities are ordinarily able to select the time and extent as well as the

[1] An example of this view is to be found in the reasons which led the Government of Canada to adopt, after consultation with the International Monetary Fund, its present system of a flexible rate. The *Annual Report of the Foreign Exchange Control Board for the Year 1950* (Ottawa, 10 April, 1951) says, on page 15, " in considering action appropriate . . [which the Board stated was required to check certain inflationary factors in the Canadian balance-of-payments position at a time when inflationary pressures were already causing concern] the Government reviewed the possibility of moving the par value of the Canadian dollar to a new and higher fixed level, but concluded that under the conditions then existing it was impossible to determine in advance with any reasonable assurance what new level would be appropriate".

[2] Alternatively, when wide fluctuations occur in world economic conditions generally, countries must be prepared either to counter them as far as possible through direct trade controls or to respond to them by variations in domestic prices and employment.

direction of such adjustments as they find necessary.[1] Only when, as has been true since the war, exchange rates are permitted to remain far out of line with their equilibrium positions is it possible for speculators to count with assurance on the probability of profits sufficiently large to make their operations worth the risk. The avoidance of undue speculative activity and profit is, however, a relatively minor consideration, compared with the contribution which a more flexible monetary policy could make in helping to reduce the inflationary impact of the increases in raw material prices, and in facilitating such further adjustments as subsequent developments in the world market may require.

The second of the two conditions for the successful use of foreign exchange policy in attempting to turn the mounting tide of inflation in European countries is that currency appreciation should be a part of a more fully developed and integrated set of measures designed to cope with inflationary forces in all forms. Such benefits as might be initially obtained through the reduction in import prices would prove to be fleeting if prices and wages nevertheless continued to rise. The upward movement is already far advanced in most countries, and far more than currency appreciation alone is required to bring it to a halt. The necessary combination of measures includes a fiscal policy aimed both at offsetting increased defence expenditure by increased taxation and at preventing undue inflation of profits , an investment policy, combining fiscal and credit measures with direct controls, designed to curb capital outlay of a non-essential nature and to combat the hoarding of raw materials and other goods ; and a national wage policy which, subject to such minimum further adjustments as equity may require, places an agreed moratorium on further general wage increases until there is time to put into effect and test the price stabilization policy as a whole.[2]

If a number of countries do in fact succeed by these means in restoring internal monetary stability, the effects should prove to be beneficial not only for them, but for other countries as well. Certainly there is little reason to believe that the impact of currency appreciation on other countries would be more serious than if, in the slightly longer run, inflation proceeds unhampered in countries which should be able to counter it effectively. One important way in which the benefits from currency appreciation would tend to be generalized is by the reversal of present expectations expressed in commodity speculation and in the hoarding of raw materials. At the moment, there is altogether too much confidence in all countries that raw materials will be short and that prices will continue high or go higher still, and, as pointed out in Chapter 3, this attitude helps to make commodity shortages worse than they really are. If it were possible, through import price reductions induced by currency appreciation, to weaken this belief in the inevitability of shortages and high prices, the effects would be salutary not only for countries which appreciated their currencies, but also for those which did not.

It might, perhaps, be argued that the best time for an appreciation of European currencies has passed : the rise in raw material prices has already substantially inflated the price and wage structure of most countries. Such a view, however, would fail to take account of two facts which have been established by the preceding analysis : [3] first, that the effect of the high import prices on internal price levels has only partly been exhausted, even if it were assumed that the rise in primary prices would go no further ; second, that the situation both in world markets and in internal markets is such that the spiral of rising prices and incomes will very probably continue to develop. The impact of even a modest appreciation of European currencies would help to slow down this spiral ; a more drastic revision might well break it altogether.

[1] This conclusion seems to be well justified by the experience of the United Kingdom under the flexible " managed currency " system which it operated successfully during the period from 1932 until 1936—that is, from shortly after the depreciation of sterling during the depression until the tripartite agreement with the United States and France That experience shows that sufficient day-to-day stability was maintained to avoid interference with the orderly conduct and recovery of trade, while at the same time the monetary authorities were able to make necessary adjustments in the rates without leaving the way open for large speculative profits

[2] In some countries, the reimposition or strengthening of import controls might also prove to be necessary, although the greater the number of European countries appreciating their currencies, the less would be the need for such measures. Western Germany is a case in point, although the necessity already experienced of back-tracking in its liberalization of imports from other western European countries need not be greatly increased by currency appreciation if undertaken as part of a general upward revision of European currencies.

[3] See also section 1 of this chapter.

Appendix A

SUPPLEMENTARY STATISTICS

Table I

INDEX NUMBERS OF TEXTILE PRODUCTION

Country	Percentage share [a] of total in 1950	1938 = 100				1948 = 100							
						1949				1950			
		1947	1948	1949	1950[b]	First quarter	Second quarter	Third quarter	Fourth quarter	First quarter	Second quarter	Third quarter	Fourth[b] quarter
Austria	1.0	31 [c]	51 [c]	77 [c]	94 [c]	132	147	148	179	194	180	170	202
Belgium	4 9	130	116	120	146	102	103	98	110	118	110	120	143
Czechoslovakia [d]	3 5	60 [c]	77 [c]	81 [c]	89 [c]	105	110	90	118	122	121	95	130
Denmark	0.6	108	134	151	172	113	113	99	126	130	137	115	131
Finland	0.7	97	110	131	146	115	120	112	126	130	132	117	141
France	16 3	89	102	101	109	103	107	86	103	107	111	93	116
Germany : western zones	16 4	25	41	75	97	153	175	184	217	224	220	229	277
Greece	1 8	90	89	100	137	106	108	115	125	125	142	168	178
Hungary	1 4	68	88	111	..	.	.	..	..	..		.	..
Ireland	0 5	139	152	167	193	112	103	98	128	123	131	120	135
Italy	11.1	100	96	99	102	105	111	94	103	107	103	96	119
Netherlands	3.4	87	105	122	136	111	115	110	127	131	129	122	138
Norway	0.7	124	144	168	180	125	122	95	123	135	130	102	133
Poland	5 0	86 [c]	114 [c]	133 [c]	150 [c]			.	..	..	..	.	.
Spain	.	152 [e]	153 [e]	145 [e]	163 [e]	87	105	86	102	99	111	102	114
Sweden	2 8	121	135	142	139 [d]	107	108	92	104	106 [d]	102 [d]	89 [d]	104 [d]
United Kingdom	29.9	81	95	102	112	108	105	102	114	120	117	112	122
Total of countries listed	100.0 [f]	75 [f]	87 [f]	98 [f]	110 [f]	110	114	104	120	125	124	117	137

Sources and methods see Appendix B

The data are obtained by applying the volume indices shown for 1950 (1938 = 100) to 1938 weights which are proportional to net output The figures thus calculated take no account, therefore, of shifts in relative prices since 1938

[b] Provisional

[c] 1937 = 100 , for Poland 1937 production in pre-war area = 100

[d] Including ready-made clothing

[e] 1940 = 100
Excluding Spain.

Table II

INDEX NUMBERS OF CHEMICAL PRODUCTION

Country	Percentage share [a] of total in 1950	*1938 = 100*				*1948 = 100*							
						1949				1950			
		1947	1948	1949	1950[b]	First quarter	Second quarter	Third quarter	Fourth quarter	First quarter	Second quarter	Third quarter	Fourth [b] quarter
Austria	2 4	77 [c]	145 [c]	167 [c]	208 [c]	93	121	125	123	134	136	144	166
Belgium	4 1	129 [d]	151 [d]	158 [d]	170 [d]	104	106	97	113				
Czechoslovakia	4 1	102 [c]	124 [c]	134 [c]	140 [c]	105	110	101	116	109	109	108	115
Denmark	1.1	100	114	126	139	113	110	102	118	123	130	107	128
Finland	1.8	154	178	204	234	112	113	108	123	131	140	123	133
France	9.3	97	114	112	118	102	105	87	100	102	106	99	115
Germany : western zones	18.7	34	49	69	89	135	140	141	148	157	177	199	194
Greece	1.0	59	63	81	94	114	126	136	138	138	121	153	185
Hungary	2 0	88	107	174									
Ireland	0 4	103	109	122	144	113	111	104	122	132	124	127	144
Italy	6 0	80	93	105	121	102	114	120	114	113	129	128	151
Netherlands	1.4	83	105	110	133	106	103	98	112				
Norway	1.6	111	119	137	174	119	125	119	141	154	177	154	154
Poland	12 5	154 [c]	305 [c]	408 [c]	480 [c]								
Sweden	6 3	167	190	205	220								
Switzerland [e]	2 1	171	174	158	169								
United Kingdom	25 2	161	184	189	214	104	105	96	107	111	116	118	122
Total of countries listed	100 0	93	116	131	152	109	113	107	117	121	128	130	138

Sources and methods see Appendix B

NOTE — As far as possible, the indices cover the production of basic chemicals, fertilizers, dyestuffs, industrial vegetable oils, soap and matches, but not the production of rubber and rayon

[a] The data are obtained by applying the volume indices shown for 1950 (1938 = 100) to 1938 weights which are proportional to net output The figures thus calculated take no account, therefore, of shifts in relative prices since 1938

[b] Provisional

[c] 1937 = 100, for Poland 1937 production in pre-war area = 100

[d] 1936-1938 = 100

[e] Approximate index, based on exports and man-hours worked

Table III

INDEX NUMBERS OF BUILDING MATERIALS PRODUCTION

Country	Percentage share [a] of total in 1950	*1938 = 100*				*1948 = 100*							
						1949				1950			
		1947	1948	1949	1950[b]	First quarter	Second quarter	Third quarter	Fourth quarter	First quarter	Second quarter	Third quarter	Fourth[b] quarter
Austria	2 5	49 [c]	108 [c]	143 [c]	156 [c]	77	139	166	145	98	160	177	141
Belgium	4 9	91 [d]	95 [d]	70 [d]	85 [d]	68	68	75	85	81	89	88	101
Czechoslovakia	3.7	92 [c]	110 [c]	112 [c]	123 [c]	82	107	111	109	91	118	130	114
Denmark	1 8	112	127	135	144	85	113	113	112	93	125	119	116
Finland	1.1	104	128	141	150	92	110	136	105	98	124	130	113
France	8 2	105	125	127	133	105	106	92	101	101	108	104	112
Germany : western zones	19 2	31	53	78	93	120	151	163	160	133	178	200	197
Greece	0.7	59	87	99	120	105	110	116	127	107	131	154	162
Hungary	0.5	91	101	130		.	..			.	.	..	..
Ireland	0.4	146	207	251	275	116	127	112	129	118	126	141	147
Italy	6 8	84	90	96	119	91	116	107	113	118	141	130	140
Netherlands	2 3	72	95	111	125	111	109	116	129	125	128	132	141
Norway	2 2	126	139	149	159	.			.				
Poland	3.5	73 [e]	94 [e]	111 [e]	128 [e]		.		.	.			.
Spain	4.5	155 [f]	158 [f]	155 [f]	187 [f]			.			.		
Sweden	2.5	135	139	142	155				..	..			
United Kingdom	31.4	128	150	156	165	104	104	101	107	108	109	109	114
Yugoslavia	3.8	205 [g]	225 [g]	250 [g]	273 [g]								.
Total of countries listed	100 0	84	102	111	124	101	111	112	115	109	124	127	130

Sources and methods see Appendix B

NOTE — The data relate to the production of stone, lime, bricks, tiles, cement, glass, and ceramics

[a] The data are obtained by applying the volume indices shown for 1950 (1938 = 100) to 1938 weights which are proportional to net output The figures thus calculated take no account, therefore, of shifts in relative prices since 1938

[b] Provisional
[c] 1937 = 100
[d] 1936-1938 = 100
[e] Current production compared with 1937 production in pre-war area
[f] 1935 = 100
[g] 1939 = 100

Table IV

PRODUCTION OF COAL

Millions of tons

Country	1948				1949				1950			
	First quarter	Second quarter	Third quarter	Fourth quarter	First quarter	Second quarter	Third quarter	Fourth quarter	First quarter	Second quarter	Third quarter	Fourth quarter
Belgium	6 28	6.68	6 51	7.21	7.39	7.18	5 96	7 33	7 29	6 89	6 00	7.12
France	12 96	11.99	11 06	7 28	13 39	12.64	12 12	13 05	13 63	12 32	11.84	13.06
Saar	2 89	3 00	3 32	3 36	3.49	3.42	3 61	3 74	3.85	3 68	3.67	3.89
Germany : western zones [a]	20 58	20 65	23 14	24.04	25 35	24.76	26.98	27.73	28 21	26.37	28.20	29 54
Netherlands	2 78	2.72	2 74	2 80	2 85	2.83	2.98	3 04	3 11	3 00	3.11	3.03
Poland	16.71	16 65	18.13	18 77	18 08	17 86	18 68	19 46	19.68	18 60	19.87	19.64
United Kingdom [b]	52 60	54.35	50.11	55.55	55 39	54 17	51 71	57.34	56 83	54.86	51.43	56 62
Total of countries listed	114 80	116 03	115 01	119 01	125.94	122.86	122 04	131.68	132 60	125.71	124 12	132.89
United States [c]	142 68	145 28	154.69	153.06	125.67	129.63	86 05	94.62	97.31	136.12	130.31	141.01

Sources see Appendix B

NOTE — The data relate to the net pit-head production of coal (clean coal raised to the surface) The production of lignite is excluded.

[a] Including production of pitch coal
[b] Including production of opencast coal
[c] Including a small amount of lignite

Table V

PRODUCTION OF ELECTRIC POWER

Billions of kilowatt hours

Country	1948				1949				1950			
	First quarter	Second quarter	Third quarter	Fourth quarter	First quarter	Second quarter	Third quarter	Fourth quarter	First quarter	Second quarter	Third quarter	Fourth quarter
Austria	1 13	1.37	1 53	1 23	1 14	1 47	1 53	1 36	1 27	1 60	1 78	1 64
Belgium [a]	2.01	1 86	1.88	2 16	2.13	1 97	1 88	2 19	2 16	1 94	1 95	2 43
Czechoslovakia	1 86	1.76	1.76	2.14	2.11	1 94	1 95	2 27				
Denmark	0.48	0.39	0 44	0 53	0.49	0 42	0 45	0 57	0 52	0 43	0 47	0 61
Finland	0 69	0.70	0 74	0 83	0 87	0 88	0 83	0 98	1 03	0 98	1 01	1 10
France [b]	7 04	6.95	6 77	6 81	6 91	7 02	6 72	7 75	7 70	7 62	7 25	8.90
Germany, western zones	8.21	7 69	7 97	8 74	9 48	8 87	9 56	10 81	10 53	9 84	10 94	12 66
Italy	5.11	5.77	6 09	5 73	4 75	5 41	5 39	5 23	5 32	6 31	6 51	6 86
Netherlands	1 40	1 22	1 15	1 50	1 50	1 35	1 35	1 79	1 78	1 57	1 66	2 03
Norway [c]	2 74	3 13	2 93	3 65	3 97	3 60	3 35	4 27	4 55	4 07	3 89	4 82
Poland [c]	1 87	1 70	1 81	2 13	2 04	1 83	1.95	2 33	2 33	2 12	2 24	2 85
Spain	1.74	1 62	1 30	1 45	1 40	1 37	1 30	1 57	1 84	1 79	1 69	1 69
Sweden	3 19	3 51	3 39	4 00	4 11	3 85	3 76	4 44	4 66	4 30	4 28	5 11
Switzerland [d]	2 06	2 17	2 43	1 99	1 59	2 19	2 13	1 86	1 79	2 30	2 80	2 23
United Kingdom [e]	12 73	10 61	10 10	13 09	13 66	11 02	10 38	14 06	14 87	12 32	11 72	16 11
Total of countries listed	52 25	50.42	50 28	55 97	56 15	53 17	52 51	61 48	62 66	59 41	60.33	71 44
United States	82 87	80.77	84 51	88 19	87 35	83 65	85 80	87 75	92 33	93 29	98 15	104 16

Sources see Appendix B

NOTE — The data relate to total production of electric power unless otherwise stated

a Total production of public utilities and other plants with an installed capacity of more than 100 kilowatts

b Production of hydro-electric plants with a generating capacity of over 1,000 kilowatts and of thermo-electric plants with a capacity of over 5,000 kilowatts

c Production of public utilities and other plants with an installed capacity of 1,000 kilowatts and over

d Production of public utilities, plus purchases for the public grid from railroads and industrial establishments

e Public utility production, excluding Northern Ireland

Table VI

PRODUCTION OF HYDRO-ELECTRIC AND THERMO-ELECTRIC POWER

Billions of kilowatt hours

Country	Total				Hydro				Thermo			
	1938	1948	1949	1950	1938	1948	1949	1950	1938	1948	1949	1950
Austria	3.0	5.3	5.5	6.3	2 4	4.4	4.2	5 0	0 6	0.9	1 3	1.3
Belgium [a]	5.3	7.9	8 2	8.5	—	0.1	—	0.1	5.2	7.8	8 1	8.4
Czechoslovakia	4.1	7 5	8 3	9.1	0.6	0.9	1.0	1.1	3.5	6.6	7.3	8 0
Denmark	1.1	1.8	1.9	2 0	—	—	—	—	1.1	1.8	1.9	2.0
Finland	3.1	3.0	3.6	4.1	2.5	1.9	3 0	3.6	0.7	1 0	0.5	0 5
France [b]	18.6	27.6	28.4	31 5	8 9	14 3	10 6	15 6	9 6	13 2	17 8	15.9
Saar	1 3	1 2	1.5	1.5	—	—	—	—	1 3	1 2	1.5	1 5
Germany	50.1 [c]	48 2	56 7	..	6.9 [c]	..	..	..	43.1 [c]	..	..	.
of which western zones	31 1	32 6	38 7	44 0	6 5	7 7	6 6	8 2	24 6	24 9	32 1	35 7
Soviet Zone	17 2	14 4	16 5		0 4				16 8			..
Italy	15.5	22.7	20.8	25.0	14.6	20.9	17.4	22.2	1.0	1.8	3.4	2 8
Netherlands	3.5	5 3	6.0	7 0	—	—	—	—	3.5	5 3	6 0	7 0
Norway [d]	9.6	12.4	15.2	17 3	9 5	12.4	15 2	17 3	0.1	0.1	—	—
Poland [d]	7 9 [e]	7 5	8.1	9 5	0.1 [e]	0 4	0.4	0.5	7 9 [e]	7 1	7.7	9 0
Spain	2.7	6 1	5.6	7.0	2.2	5 2	4.0	5.0	0 5	0 9	1.6	2 0
Sweden	8 2	14 1	16 2	18 3	7 3	12.6	15.1	17 5	0 9	1 4	1 0	0 9
Switzerland [f]	7.0	10.4	9 7	10 5	7 0	10.4	9 6	10 3	—	0 1	0 2	0 2
United Kingdom [g]	24.4	46.5	49.1	55.0	1 0	1.3	1.2	1 5	23 4	45 2	47 9	53.5
Yugoslavia	1.1	2 0	2.2	2.4	0.5	1.0	1.0	1.1	0 6	1.0	1 2	1.3
Other European countries	4.6	7.3	8.3	9 6	0.7	1.1	1.1	1 4	3 9	6 2	7.2	8.2
Total Europe (excluding U.S.S.R)	181	247	267	300	65	95	91	111	116	152	175	189
United States [h]	142 0	336.8	344.5	387 9	44.3	82.5	89.7	95 9	69 5	200 2	201.3	233.1

Sources see Appendix B.

NOTE — The data relate to total production of electric power unless otherwise stated The main exception is the United Kingdom (see footnote *g*) However, an estimate of total electric power production for the United Kingdom, including Northern Ireland, is included in the European totals

a Total production of public utilities and other plants with an installed capacity of more than 100 kilowatts

b Production of hydro-electric plants with a generating capacity of over 1,000 kilowatts and of thermo-electric plants with a capacity of over 5,000 kilowatts.

c Post-war boundaries Total production of electric power within pre-war area, excluding the Saar, was 51 4 billion kilowatts

d Production of public utilities and other plants with an installed capacity of 1,000 kilowatts and over

e Post-war boundaries Total production of electric power within pre-war area was 4 billion kilowatts

f The figures relate to total of twelve months ending September 30 of year indicated

g Public utility production only, excluding Northern Ireland.

h Total production relates to output of industrial establishments as well as that of privately and municipally owned electric utilities The data for hydro-electric and thermo-electric power relate only to the production of privately and municipally owned electric utilities.

Table VII

ELECTRIC GENERATING CAPACITY

End of year *Thousands of kilowatts*

Country	Installed capacity			
	1938	1948	1949	1950
Austria	1,157	1,717	1,806	2,000
Belgium	2,619	2,743	2,858	2,986
Bulgaria [a]	104	170	..	
Czechoslovakia	1,870 [b]	2,740	2,900	3,100
Denmark	603	832	832	872
Finland	870	965	1,088	1,183
France	9,179	9,715	10,375	11,047
Germany	16,534 [c]	14,812	15,453	16,630
of which western zones	9,239	10,092	10,653	11,630
Soviet Zone [d]	5,956	4,720	4,800	5,000
Greece	126	199	217	245
Hungary	690	823	870	1,030
Ireland [a]	160	218	234	269
Italy	5,839	7,398	7,843	8,400
Luxembourg	137	139	139	135
Netherlands	1,741	1,995	2,053	2,125
Norway	2,055	2,684	2,897	3,016
Poland	1,692 [e]	2,460	2,786	2,970
Portugal	280	334	345	480
Rumania	510	600	600	740
Spain	1,530	1,990	2,268	2,550
Sweden	2,262	3,550	3,725	3,980
Switzerland [f]	2,085	2,690	2,920	3,110
Turkey	178	306	382	402
United Kingdom [g]	9,365	13,194	13,913	15,085
Yugoslavia	495	620	655	682
Total of countries listed	62,081	72,894	77,450	83,450

Sources and methods see Appendix B.

Note. — The figures relate to total installed capacity unless otherwise stated

[a] Public utility production only.

[b] 1936.

[c] Pre-war boundaries, excluding the Saar.

[d] Including Berlin for all periods.

[e] Pre-war boundaries

[f] At 30 June

[g] Public utility production only, excluding Northern Ireland

Table VIII

PRODUCTION OF CRUDE PETROLEUM AND CONSUMPTION OF CRUDE PETROLEUM AND PRODUCTS

Millions of tons

Country	Production of Crude Petroleum				Apparent Consumption of Crude Petroleum and Products [a]			
	1938	1948	1949	1950	1938	1948	1949	1950
Austria	0.06	0.96	1.25	1.50	0.39	1.02	1.30	1.57
Belgium-Luxembourg	—	—	—	—	0.82	1 68	1 76	2.26
Czechoslovakia	0 02	0.04	0.05	0 05	0.39	0.41	.	..
Denmark	—	—	—	—	0 86	1 27	1.42	2 00
France	0 07	0 05	0.06	0.13	7.58	8 03	9.68	11.46
Germany [b]	1.47	1 27	1.62	2 06	7 29			.
of which western zones	1 17	0 64	0 84	1 12	5 72	2 29	3 05	3 73
Hungary	0 04	0 48	0 51	0.55	0 25		.	.
Italy	0 01	0.01	0.01	0 01	2 49	2 64	3.29	4.89
Netherlands	—	0 50	0.62	0 71	1.56	2.90	2.94	3 35
Norway	—	—	—	—	0.59	1.44	1.49	1 57
Poland	0.51	0 15	0.17	0 18	0.50			
Portugal	—	—	—	—	0.19	0 60	0 54	0.55
Rumania	6 59	4.30	4.72	5.35	2.13		.	.
Spain	—	—	—	—	0.34	1 06	1 24	1 62
Sweden	—	—	—	—	1 30	3.54	3 24	3 98
United Kingdom [c]	0.13	0 16	0.16		12 40	19.18	18 91	19 85
Other European countries	0 12	0.28	0 40	0 54	1 87	3 71	4 33	5 05
Total Europe (excluding U S S R)	9 02	8 20	9.57	11 24	40 96	54 86	59.41	69 00
United States	171.04	276 74	252.10	270 12	149.15	267.05	266 22	298 48

Sources see Appendix B

NOTE — The figures do not include the production and consumption of synthetic oil, except in the case of Germany All pre-war figures relate to pre-war boundaries

[a] In terms of crude oil—i e, the production of crude petroleum plus net imports of crude petroleum and products (expressed in terms of crude oil equivalent), with no allowance for changes in stocks The figures for France, Italy, the United Kingdom and the United States, however, relate throughout to refinery of crude oil plus net imports of refined products (in terms of crude oil) and, therefore, take into account stock changes of crude petroleum The figures for France, moreover, have been adjusted for changes in stocks of refined products

[b] The figures include the production of liquid products from hydrogenation and synthetic work plants The production amounted to 0 92 million tons crude equivalent for the whole of Germany in 1938 and an estimated 0 62 million tons for the western zones of Germany Consumption has been taken as equal to production

[c] Production of crude petroleum relates mainly to shale oil

Table IX

CONSUMPTION OF ENERGY

Millions of tons, coal equivalent

Country	Coal, Coke and Lignite [a]				Electric Power				Crude Petroleum and Products				Total			
	1938	1948	1949	1950	1938	1948	1949	1950	1938	1948	1949	1950	1938	1948	1949	1950
Austria	3 8	7.0	7.5	7 0	1 9	3 3	3 5	4 0	0 6	1 5	1 9	2.4	6 3	11.8	12 9	13.3
Belgium-Luxembourg	25 0	25 4	23 2	23 0	3 6	5 3	5 5	5 8	1 2	2 5	2.6	3 4	29 8	33 2	31.4	32.1
Czechoslovakia	19.8	26.7	27 8		2 6	4 7	5 2	5 7	0 6	0 6	.		22 9	32 0	33 7	.
Denmark	4 7	3 3	4 2	5 3	0 7	1 2	1 2	1 3	1 3	1 9	2.1	3.0	6 7	6 3	7 5	9.6
Finland	1 4	1.8	0.9	1 6	2.0	1 9	2.2	2 6	0 4	0 8	0.6	0.8	3 7	4.4	3 7	5.0
France [b]	60 8	59.3	65.3	58 7	11 7	18 1	18 8	20 7	11 4	12 0	14.5	17.2	83 8	89 6	98.9	96.9
Germany [c]	176 8	.	..		34 8	30 3	35 6	40 1	10 9		.		221 2		..	..
of which western zones		75 7	83 6	86 5	19 6	20 5	24 4	27 6	8 6	3 4	4 6	5 6		99 6	112 5	119 8
Italy [d]	13 4	8 6	8.0	7 9	9 8	14 3	13 1	15 7	3 7	4 0	4.9	7 3	26.9	27.0	26.3	31.7
Netherlands	11 6	10 5	11 3	11.7	2 2	3 3	3.8	4 4	2 3	4.3	4 4	5 0	16 1	18.2	19.4	21.1
Norway	2 9	2.0	1.8	2 3	6.1	7.8	9 6	10 9	0 9	2 2	2 2	2 4	9.9	12 0	13.6	15.5
Poland [e]	24 3	37.2	38 8		2 5	4.7	5.1	6 0	0 8				27 5		.	.
Spain	6 3	10.7	11.1	10.9	1 7	3 8	3.5	4 4	0 5	1.6	1.9	2.4	8 5	16 2	16.5	17.7
Sweden	7 5	6.6	5.4	6 7	5 1	8 9	10 2	11 5	2 0	5 3	4.9	6.0	14 6	20 8	20.5	24.2
Switzerland	3.5	2 6	1.9	2 6	4 4	6.6	6 1	6 6	0 7	1 3	1.5	1.8	8 6	10.5	9.5	11.0
United Kingdom	166.1	164 5	163.8	165 5	21 2	35 9	38 0	42 0	18 6	28 8	28 4	29.8	205 9	229.2	230 2	237.3
Other European countries	13.7	16 1	16 2		3 3	5 5	6 2	7 1	5 6	8 5	9 7		22 5	30.1	32.3	.
Total Europe (excluding U.S.S.R.)	541	482	498	509	114	156	167	189	61	82	89	103	715	718	753	799

Sources and methods see Appendix B

NOTE — The figures relate to the total consumption of coal, coke, lignite, electric power and crude petroleum and crude petroleum products No adjustment has been made for fuelwood consumption

[a] The consumption of coal, coke and lignite relate to production of hard coal and lignite plus net imports of coal, coke and lignite, with adjustments made for change in stocks In the case of Austria, Czechoslovakia, Denmark, Finland, Italy, Spain and Switzerland, the data relate to apparent consumption with no allowance for change in stocks Only the pre-war year has not been adjusted for Germany, Netherlands, Norway, Poland and Sweden Coal and lignite consumed by electric power plants is excluded

[b] The Saar is included with France for post-war years The data on total consumption of energy include consumption of natural gas

[c] The figures for 1938 relate to pre-war boundaries, including the Saar

[d] The data on total consumption include consumption of natural gas

[e] The figures for 1938 relate to pre-war boundaries

Table X

PRODUCTION OF IRON ORE, PIG-IRON AND FERRO-ALLOYS, AND CONSUMPTION OF SCRAP

Millions of tons

Country	Production of Iron Ore				Production of Pig-iron and Ferro-alloys				Consumption of Scrap			
	1938	1948	1949	1950	1938	1948	1949	1950	1938	1948	1949	1950
Austria	0.8	0.4	0.4	0 6	0.6	0.6	0.8	0.9	0.4	0.4	0.5	0.6
Belgium-Luxembourg	1.6	1.1	1.3	1.2	4.0	6.6	6.1	6.2	0 8	2.6	2.1	2.2
Czechoslovakia	0 6	0.5	0 5	0 5	1.3	1.7	1.7	1.8	0 9	..	..	..
France	10 9	7.6	10.4	9.9	6.0	6 6	8.3	7.8	2 8	3.7	4.3	..
Saar	—	—	—	—	2.4	1.1	1.6	1.7	0.7	0.4	0.6	.
Germany	3.7 [a]	2.0	2.5	3.0	15.3 [a]	4.8	7.4	9.8	9.7 [a]	..	..	..
of which western zones	3 5	2 0	2.5	2 9	15 2	4 7	7 1	9 5	8 5	4 0	7.0	9 2
Soviet Zone	0 2	0 1	0 1	0 1	0 1	0 2	0 3	0 3	1 2			
Hungary	0.1	0.1	0.1	0 1	0 3	0.4	0 4	0.5			.	..
Italy	0 5	0 3	0.3	0 2	0 9	0 4	0 4	0 5	2.1	2 3	2 2	2.5
Netherlands	—	—	—	—	0.3	0 4	0.4	0.5	0.1	0.5	0.6	0.6
Poland	0 3 [b]	0.2	0 2	0 3	1.3 [b]	1.1	1 2	1.4	1.1 [b]		.	..
Spain	1.2	0.8	0.9	1.0	0.4	0.5	0.6	0.7	.	0.3	0.3	0.4
Sweden	8.5	8.1	8.4	8.5	0.7	0.8	0.8	0.8	0.7	0 9	1.0	1.1
Turkey	—	0.1	0.1	0.1	—	0 1	0.1	0 1	—	—	—	—
United Kingdom	3.6	4.0	4.1	3 9	6.9	9.4	9 7	9.8	8 7	12 4	13 4	14.1
Other European countries	1.5	0 7	0 8	0.9	0.3	0 6	0 7	0 7				
Total Europe (excluding U.S.S.R.)	33.3	25.8	30.0	30.3	40.5	35.1	40.4	43.1			.	
United States	14.5	51.5	43 3	50 2	19.1	55.2	49.2	59 3	21.7	57 3	49 8	62.1

Sources : see Appendix B.

NOTE — *Iron ore* The data relate to the metal content of iron ores produced, including manganiferous iron ores but excluding pyrites For percentages of metal content, see Appendix B

Pig-Iron and ferro-alloys The data relate to total production of pig-iron and blast furnace ferro-alloys, both for steel-making and other purposes.

Consumption of scrap The data relate to the consumption of scrap in blast furnaces, steel works and iron foundries See Appendix B

[a] Post-war boundaries The figures for the pre-war area, excluding the Saar, were (millions of tons) iron ore, 3 7 , pig-iron, 15 7 , consumption of scrap, 9 9

[b] Post-war boundaries Production in the pre-war area was (millions of tons): iron ore, 0 3 , pig-iron, 0 9.

Table XI

PRODUCTION OF CRUDE STEEL

Millions of tons

Country	1948				1949				1950			
	First quarter	Second quarter	Third quarter	Fourth quarter	First quarter	Second quarter	Third quarter	Fourth quarter	First quarter	Second quarter	Third quarter	Fourth quarter
Belgium	0.93	0.87	1.02	1 09	1.15	1.02	0.82	0.86	0.89	0 88	0.85	1.15
Luxembourg	0 53	0.59	0.64	0.69	0.71	0.61	0.51	0.45	0.54	0 56	0.64	0.71
France	1.74	1.86	1.80	1.85	2.28	2.33	2.19	2.32	1.99	2.16	2.04	2.45
Saar	0 21	0.28	0 36	0.37	0.43	0 44	0.44	0 44	0.44	0.39	0.50	0.57
Germany : western zones	0 98	1 10	1 59	1.90	2.15	2 31	2.42	2.28	2 85	2 85	3 22	3.21
Italy	0.49	0.56	0.55	0.53	0.45	0.55	0.52	0.54	0.56	0.56	0 59	0 61
Poland	0.46	0.47	0 49	0.54	0 57	0 56	0 57	0.60	0.62	0.62	0.63	0.65
Sweden	0.31	0 32	0 27	0.35	0.35	0.33	0.31	0.38	0 39	0.35	0 33	0.39
United Kingdom	3.80	3.90	3.55	3.87	4.03	4 05	3.70	4.03	4.24	4 21	3.86	4 24
Total of countries listed	9.45	9.94	10.26	11.19	12.10	12.20	11.49	11.91	12.51	12.58	12.66	13.99
United States	20.00	19.12	19.91	21.39	21 86	19.87	17.33	11.68	20.15	22.59	22.22	22.78

Sources : see Appendix B

NOTE. — The figures relate to the total production of steel ingots and direct castings, including special alloyed steels, whether for use by the maker or for sale. Wrought (puddled) iron is excluded.

Table XII

PRODUCTION OF BASIC CHEMICALS IN SELECTED COUNTRIES

Thousands of tons

Country	Sulphuric Acid				Calcium Carbide				Caustic Soda				Soda Ash			
	1938	1948	1949	1950	1938	1948	1949	1950	1938	1948	1949	1950	1938	1948	1949	1950
Austria	28 [a]	6	7	8	5 [a]	8	8	12	6 [a]	14	22	31	42 [a]	72	92	95
Belgium	749	829	826													
France	1,272	1,275	1,151	1,215	156	181	187	176	126	196	216	240	484	715	582	717
Germany : western zones	1,348 [b]	830	1,139	1,444	528 [b]	420	522	633	138 [b]	186	251	335	425 [b]	400	568	735
Soviet Zone	375 [b]	147	290	334	192 [b]	48	192	.	124 [b]	80	110	127	378 [b]	49	75	83
Italy	1,076	937	1,096	1,141	135	138	96	119	165	193	183	151	352	378	350	341
Netherlands	525	410	439	485												
Norway					51	22	28	..								
Poland	310 [c]	218	275	283	100 [c]	162	162		30 [c]	48	56	65				
Portugal	80	141	193	170									4	15	12	12
Rumania	43	33	44	59												
Spain									30 [d]	57	58	65	64 [d]	70	77	79
Sweden	167	281	.						16	58		..				
United Kingdom	1,010	1,578	1,687	1,816					[e]	[e]	[e]	[e]	[e]	[e]	[e]	[e]
Yugoslavia	24	44	45	46					10	19	19	.	20	35	35	..
Total of countries listed	7,007	6,729	7,480	8,125	1,167	979	1,195	1,330	645	851	980	1,110	1,769	1,734	1,791	2,100
United States	10,393	10,371	12,134	..	619	549	605	948 [f]	2,156	2,017	2,295	2,564 [f]	4,151	3,553	3,341	

Sources and methods see Appendix B

NOTE — If only one or two figures in the series for a particular chemical are not available—i e, Sweden 1949 and 1950 (sulphuric acid and caustic soda), the Soviet Zone of Germany, Norway and Poland 1950 (calcium carbide), Yugoslavia 1950 (caustic soda and soda ash)—estimates have been made and included in the total For a number of countries, however, no comparable data are available for all periods under review for the four chemicals, in such cases no estimate has been included in the total

[a] 1937

[b] 1936

[c] Post-war boundaries Production in pre-war area was (thousands of tons) sulphuric acid, 189 and calcium carbide, 64. The pre-war production of caustic soda in the territories ceded to Poland was negligible

[d] 1941

[e] Figures not available Total production of carbonates was (thousands of tons) 1,522 in 1937 and 1,395 in 1946.

[f] 1939.

Table XIII

PRODUCTION OF FERTILIZERS

Thousands of tons

Country	Superphosphates (P_2O_5 content)				Potash (K_2O content)				Nitrogen (N content)			
	1938	1948	1949	1950	1938	1948	1949	1950	1938	1948	1949	1950
Belgium-Luxembourg	38	120	115	.	—	7	7	7	94	153	165	166
Czechoslovakia	22	31		.	—	—	—	—	24	32	36	..
France	192	236	168	167	582	769	896	1,018	177	184	213	236
Germany : western zones	110		64	75	740	720	749	912	367	340	370	442
Italy	225	125	229	..	—	—	—	—	109 [a]	102	120	..
Netherlands	91	152	170	170	—	—	—	—	99	83	90	153
Norway	6	6	6	.	—	—	—	—	84	86	124	159
Poland	36 [b]	45	52	..	108 [c]	—	—	—	51 [b]	54	65	..
Spain	194 [d]	127	152	170	121 [d]	166	168	175	4	4	6	9
Sweden	52	78	97		—	—	—	—	8 [a]	21	21	..
United Kingdom	65	211	220	223	—	—	—	—	121	249	257	265
Total of countries listed	1,031	1,262	1,304	1,400	1,551	1,662	1,820	2,112	1,138	1,308	1,467	1,700
United States	643	1,472	1,520	1,604	288	1,034	1,014	1,145	240 [e]	905 [e]	975 [e]	995 [e]

Sources see Appendix B

[a] 1938/39

[b] Pre-war boundaries

[c] Pre-war boundaries, 1938 production in post-war boundaries was nil

[d] 1935

[e] Twelve months ending 30 June of year stated

Table XIV

PRODUCTION AND CONSUMPTION OF WOOD-PULP

Thousands of tons

Country	Production				Consumption [a]			
	1938	1948	1949	1950	1938	1948	1949	1950
Austria	363	216	290	343	243	201	209	232
Belgium-Luxembourg	70	52	55	75	183	213	211	259
Czechoslovakia	318	260	270		227	222	230	.
Denmark	3	1	1	1	53	76	65	67
Finland	2,110	1,675	1,613	1,913	865	817	691	857
France	347	466	485	532	740	710	811	936
Germany	2,462 [b]	.			2,544 [b]		..	
of which western zones	1,029	450	700	865		560	950	1,123
Italy	193	203	242	300	460	301	444	503
Netherlands	105	42	73	85	184	201	198	223
Norway	900	816	901	1,018	403	600	610	650
Sweden	3,061	3,003	3,024	3,250	1,086	1,106	1,225	1,300
Switzerland	84	142	128	140	101	212	153	167
United Kingdom	70	64	80	90	1,794	1,035	1,411	1,659
Other European countries	323	358	396	463	449	490	538	633
Total Europe (excluding U.S.S.R.)	10,409	8,050	8,700	9,900	9,332	7,100	8,300	9,500
United States	5,382	11,678	11,029	13,330	6,806	13,600	12,541	15,420

Sources and methods see Appendix B

[a] Adjustment has been made for change in stocks in so far as known. In some instances, where no data on stock changes for 1950 are available or when stocks were known to have fluctuated, estimates have been made on the basis of production of paper

[b] Pre-war boundaries.

Table XV

PRODUCTION OF CEMENT

Millions of tons

Country	1938	1948	1949	1950	1949				1950			
					First quarter	Second quarter	Third quarter	Fourth quarter	First quarter	Second quarter	Third quarter	Fourth quarter
Austria	0.43 [a]	0.72	1.10	1.29	0.18	0.29	0.33	0.30	0.24	0.35	0 39	0 32
Belgium	2.91	3.33	2.93	3.56	0.58	0.75	0.79	0.81	0.70	0.93	0.96	0.97
Czechoslovakia	1.27 [a]	1.66	1.74	..	0.32	0.50	0.48	0 44		..	..	..
Denmark	0.64	0.77	0.84	0.87	0.16	0.22	0.22	0 24	0.18	0.23	0.23	0.23
France	3.55	5.38	6.44	7.21	1 40	1.71	1.62	1.72	1.52	1.86	1.92	1.90
Germany	13.93 [b]	..	..	..	..	..	.	.	..	..		..
of which western zones	11 45	5 58	8 46	10 88	1 54	2 16	2 50	2 25	1 75	2 83	3 37	2 93
Soviet Zone	2 48	.	.		.				.	.	..	..
Italy	4.61	3.14	4.04	5.00	0 70	1.11	1.14	1.09	0.99	1.31	1.41	1.30
Netherlands	0 46	0.59	0.56	0 59	0 12	0.15	0.16	0.14	0.12	0.15	0.16	0.16
Norway	0 33	0.53	0 59	0.58	0.14	0.16	0.15	0 14	0 14	0.15	0 15	0.14
Poland	3.05 [c]	1.82	2.34	2.53	0.46	0 63	0.67	0.58	0.47	0.72	0.70	0.64
Portugal	0 27	0.50	0 52	0.57	0.13	0.13	0.13	0 13	0.11	0.14	0 17	0.16
Spain	0.59	1.65	1.69	1 93	0.38	0.46	0.38	0.48	0.48	0.50	0.49	0.46
Sweden	0.99	1.49	1.69	1.94	0.28	0.45	0.52	0.44	0.35	0.52	0.56	0.51
Turkey	0.29	0.34	0.37	0.40	0.03	0.11	0.12	0.11	0.07	0.12	0.11	0.10
United Kingdom	7.84	8.66	9.36	9 91	2 21	2.41	2.41	2.33	2.36	2.52	2.60	2.43
Other European countries	3.49	4.57	5.48	6.35		.	..	..	..	..	..	..
Total Europe (excluding U.S.S R.)	45	42	49	57	9.9	13.0	13.4	13.0	11.4	14.8	15.8	14.7
United States	17 96	34.62	35 42	37.99	7.47	9.21	9.62	9 11	7.13	9.79	10.68	10.39

Sources see Appendix B

[a] 1937.

[b] Post-war boundaries Production in pre-war area, excluding the Saar, was 15 26 million tons

[c] Post-war boundaries. Production in pre-war area was 1 72 million tons.

Table XVI

PRODUCTION OF BUILDING BRICKS

Millions

Country	1938	1948	1949	1950
Austria	648 [a]	372	485	496
Belgium	2,000	2,580	1,897	1,836
Czechoslovakia	1,128 [a]	924	804	.
Denmark	426	522	543	565
Finland	144	130	167	180
France	1,238	1,293	1,233	1,258
Germany : western zones	4,572 [b]	2,058	3,541	4,232
Italy	.	1,025	1,128	1,550
Netherlands	1,007	972	1,083	1,190
Poland	3,210 [c]	975	1,253	1,541
Sweden	359	351	302	334
United Kingdom [d]	7,800	4,600	5,227	5,923
Yugoslavia	236 [e]	865	973	..

Sources and methods see Appendix B.

NOTE. — The size of bricks differs from country to country, and therefore the figures are not always comparable as between countries.

[a] 1937.

[b] 1936.

[c] 1937 estimated production in post-war area Production in the pre-war area was 1,847 million.

[d] Excluding Northern Ireland

[e] 1939.

Table XVII

MERCHANT FLEETS

Country	Merchant Fleet Tonnage [a]						Age Distribution of Tonnage (percentages of total fleet)						New Ships [b]			Ships scrapped		
	Thousands of gross registered tons				Index numbers (1939 = 100)		5 years		5 to 25 years		Over 25 years		Thousands of gross registered tons			Thousands of gross registered tons		
	1939	1948	1949	1950	1949	1950	1939	1950	1939	1950	1939	1950	1948	1949	1950	1939	1948	1949
Belgium	408	439	436	482	107	118	25	31	57	62	18	7	21	15	27	..	..	..
Denmark	1,175	1,123	1,170	1,269	100	108	17	26	69	50	14	24	50	111	126	30	15	6
Finland	590	446	479	503	81	85	..		.	..	..	..	3	5	11	..	.	..
France	2,934	2,786	3,070	3,207	105	109	13	26	71	53	16	20	273	218	250	149	20	17
Germany	4,483	428	300	460	7	10	20	9	66	37	14	53	.		145	168	7	6
Greece	1,781	1,286	1,329	1,349	75	76	6	—	50	70	44	30	—	—	—	81	10	13
Italy	3,425	2,100	2,443	2,580	71	75	2	8	66	57	32	35	25	11	98	17	2	2
Netherlands	2,970	2,737	2,990	3,109	101	105	22	19	69	66	9	15	133	125	169	56	12	2
Norway	4,834	4,261	4,916	5,456	102	113	25	30	64	57	11	12	466	640	500	101	28	17
Poland	122	180	193	199	158	163	.			.		.	3	1	7	.	..	.
Portugal	257	462	515	537	200	209	.			.	..	..	89	10	39	.	..	.
Spain	902	1,147	1,193	1,190	132	132	2	14	67	28	31	58	22	15	27	46	2	10
Sweden	1,577	1,973	2,048	2,048	130	130	15	24	53	46	32	30	101	64	108	49	8	6
United Kingdom	17,891	18,025	18,093	18,219	101	102	21	21	68	63	11	16	766	745	884	755	228	328
Yugoslavia	410	202	209	215	51	52			.	.		..	—	2	11			..
Total of countries listed	43,759	37,595	39,384	40,823	90	93	18	21	66	59	16	20	1,952	1,962	2,402	1,452	332	407
U.S.S.R.	1,306	2,097	2,118	2,125	162	163	..	1	.	48	..	51	5	13	24	..	..	..

Sources: Lloyd's Register of Shipping Statistical Tables and *Annual Summary of the Mercantile Shipbuilding of the World.*

NOTE. — The figures cover motor ships and steamers of 100 gross tons and over

[a] At 30 June

[b] Registration of ships launched during year indicated.

Table XVIII

TONNAGE OF MERCHANT SHIPS LAUNCHED

Thousands of gross registered tons

Country	1938	1948	1949	1950
Belgium	30	52	45	66
Denmark	158	99	86	125
Finland	20	7	12	10
France	47	138	155	181
Germany	481	—	[a]	155
Italy	94	112	99	107
Netherlands	240	142	169	228
Norway	55	47	59	53
Spain	1 [b]	22	15	27
Sweden	166	246	323	348
United Kingdom	1,030	1,176	1,267	1,325
Other European countries	27	15	17	23
Total Europe (excluding U S.S R.)	2,350	2,057	2,249 [c]	2,649
United States	201	126	633	437

Sources *Lloyd's Register of Shipping* *Statistical Tables*, and *Annual Summary of Merchant Ships launched in the World*

NOTE — The figures cover all motor ships and steamers of 100 gross tons and over that were launched in the year, whether they were completed during the year or were still under construction at the end of the year.

[a] Returns not available

[b] 1939

[c] No estimate for Germany has been included in the total.

Table XIX

STOCK OF COMMERCIAL VEHICLES

End of year — *Thousands*

Country	1938	1948	1949	1950
Austria	16.2 [a]	42.9 [a]	43.8 [a]	45.1 [b]
Belgium	79.3	115.4	120.4	136.0
Bulgaria	3.1 [c]	5.0	5.9	..
Czechoslovakia	31.6	..	62.9	..
Denmark	42.2 [d]	57.1	56.9	60.9
Finland	20.0	32.3	33.2	35.2
France	453.0	502.3	557.3	600.0
Germany : western zones	225.7 [e]	306.7	355.9	397.3
Soviet Zone	138.7	..	125.0	..
Greece	8.6 [c]	17.0	18.0	..
Hungary	5.3	10.2 [f]	10.3	..
Ireland	11.1 [g]	22.8	23.9	..
Italy	89.9	199.4	218.1	240.0
Luxembourg	4.4	3.9	4.2	..
Netherlands [h]	53.0	66.4	73.4	83.4
Norway	35.3	50.0	49.9	..
Poland	8.6 [i]	29.0	..	..
Portugal [j]	11.1	16.9	17.5	..
Rumania [k]	8.1	..	11.6	..
Sweden	62.2	82.4	80.1	80.7 [g]
Switzerland	22.4	32.8 [d]	37.4 [d]	40.5 [d]
Turkey	4.9	12.8	13.9	15.7
United Kingdom [d]	541.7	828.1	908.3	956.0
Yugoslavia	5.2	16.6	16.9	..
Total of countries listed	1,881.5	2,630.0	2,875.0	..

Sources and methods : see Appendix B.

NOTE. — Lorries, buses, tractor and semi-trailer combinations are included ; taxis, hired cars, trolley buses, trailers, farm and road tractors are excluded.

[a] At 31 October. Pre-war relates to 1937.
[b] At 30 April.
[c] 1939.
[d] At 30 September.
[e] At 1 July.
[f] At 1 May.
[g] 1937.
[h] At 1 August ; pre-war relates to 1939.
[i] Lorries only ; pre-war boundaries.
[j] Continental Portugal only ; figures exclude light vans.
[k] Lorries only.

Table XX

PRODUCTION OF MOTOR VEHICLES

Thousands

Country	1938	1948	1949	1950	1949				1950			
					First quarter	Second quarter	Third quarter	Fourth quarter	First quarter	Second quarter	Third quarter	Fourth quarter
PASSENGER CARS												
France	182.4[a]	100.1	187 7	257.3	38 3	48.2	42 2	59 0	52.6	70 2	59 5	74 9
Germany : western zones	174.1[b]	30 0	104.0	216.0	16.1	21 9	29 3	36.7	42 7	49.8	57 1	66 6
Italy	59.0	44.4	65 4	101.3	13.4	12 6	16.8	22.6	21.8	24.4	25 0	30 2
United Kingdom	341.0	334.8	412 3	522 5	96.2	100 5	99.5	116.1	131.4	131.1	123.7	136 3
Total of countries listed	757	509	769	1,097	164	183	188	234	248	276	265	308
United States	2,001[c]	3,909	5,119	6,666	1,055	1,327	1,576	1,162	1,343	1,751	1,895	1,677
COMMERCIAL VEHICLES												
Austria	1.2[d]	0.9	2.2	2.6	0.4	0.5	0.6	0.8	0.8	0 6	0.6	0 6
France	45.0[a]	98 3	98 0	100 3	27.1	28 1	21 2	21 6	19.7	25.8	23 7	31 1
Germany : western zones	42.7[b]	29.7	57.4	85.5	13 8	13.5	14 5	15.8	15 1	20 0	24.8	25 7
Italy	10 1	15 5	20.7	26 5	4 4	4 3	5 5	6 5	7.0	7 0	5 6	6 9
United Kingdom	104 0	173.3	216 4	261.2	51.7	52.3	51 0	61 4	66 3	67.7	60 9	66 3
Total of countries listed	203	318	395	476	97	99	93	106	109	121	116	131
United States	490[c]	1,376	1,134	1,337	325	294	289	226	295	361	353	328

Sources see Appendix B

[a] October 1937-September 1938

[b] 1936

[c] It should be noted that in 1937 the production of passenger cars was 3,916 thousand and of commercial vehicles 893 thousand

[d] 1937.

Table XXI

NUMBERS OF RAILWAY LOCOMOTIVES

End of year

Country	1938	1948	1949	1950
Austria	2,040 [a]	2,164	2,129	2,148
Belgium-Luxembourg	3,734	3,040	2,832	2,872 [b]
Bulgaria	593	.	..	
Czechoslovakia	4,122 [a]	3,080	3,027	..
Denmark	597 [c]	598 [c]	630	631
Finland	749	800	816	.
France	18,107	13,939	13,418	13,043
Saar	330 [d]	342	342	
Germany	20,381 [e]	..	..	.
of which western zones		16,377	16,230	15,402
Greece	448 [a]	238 [f]	241	250 [g]
Hungary	1,848 [g]	1,642 [h]	..	.
Italy	5,504	5,087 [g]	5,219	5,214 [b]
Netherlands	1,060	1,036	969	969
Norway	505 [g]	549	551	549
Poland	5,497 [i]	. [j]	..	.
Portugal	424	440	445	
Rumania	3,534	. [k]	..	
Spain	3,065 [l]	3,348	3,360	
Sweden	1,980	. [m]	..	.
Switzerland	878	878	864	872
Turkey	911	985	974	901 [b]
United Kingdom [n]	19,620	20,297	19,870	19,674
Yugoslavia	2,309	2,396	2,474	..
Total of countries listed	98,236	95,336	93,864	92,750

Sources and methods see Appendix B

a 1937
b At 30 September
c At 31 March
d 1933
e Pre-war boundaries, excluding the Saar, 1937
At 31 March 1949
g At 30 June
h At 1 February
i Pre-war boundaries
j 6,874 in 1947
k 3,048 in 1946
l 1935
m 2,014 in 1947
n Excluding Northern Ireland

Table XXII

NUMBER AND CAPACITY OF RAILWAY WAGONS

End of year

Country	Wagons				Capacity		
	Thousands				Thousand tons		
	1938	1948	1949	1950	1938	1948	1949
Austria . . .	35.4 [a]	24.5	30 4	31 3	538 [a]		
Belgium-Luxembourg	115 9	99.1	100 5	99 8 [b]	2,063	1,980	1,976
Bulgaria .	10.9	.	..		169		
Czechoslovakia	98.2 [a]	72 0			1.605 [a]	1,142	
Denmark	12 1 [c]	15.1 [c]	15.7	15.8	174 [c]	235 [c]	241
Finland	24.3	26.4	27.1		369	415	429
France	504 4	435.2	440 8	423 9	9,120	8,336	8,716
Saar .	15 1 [d]	11.3	10.6		258 [d]	220	207
Germany	601 1 [e]				10,172 [e]		
of which western zones		341 5	342 4	342 7			
Greece .	6 7 [a]	4 8 [f]	4 9	5 1 [g]			
Hungary .	41 0 [g]				626 [g]		
Italy	133 8	102.9 [g]	136 7	136 3 [b]	2,532	1,960 [g]	2,556
Netherlands	28 8	24.6	23 7	24 6	479	422	416
Norway .	11 4	12.3	12 4	12.3	150	180	185
Poland	169 8 [h]			..	2,824 [h]		
Portugal .	8 4	9.9	9 8	.	111	146	144
Rumania .	63 4	.		.	956		
Spain	77 4 [i]	82 3	81 7		984 [i]	1,139	1,112
Sweden	47 7	50 9	51 2		827	921	926
Switzerland	17.6	20 1	20.7	20 8	255	307	316
Turkey	14 8	15 5	14 4	14 5 [b]	231	264	271
United Kingdom [j]	1,284 3	1,189 9	1,121 9	1,113.7	14,958	15,108	14,341
Yugoslavia	53 9	.		.	780		.
Total of countries listed	3,376.5	2,953	2,932	2,910	50,281	46,013	46,332

Sources and methods see Appendix B

[a] 1937
[b] At 30 September.
[c] At 31 March
[d] 1933
[e] Pre-war boundaries excluding the Saar, 1937.
[f] At 31 March 1949
[g] At 30 June
[h] Pre-war boundaries
[i] 1935
[j] Excluding Northern Ireland

Table XXIII

NUMBERS OF TRACTORS ON FARMS

End of year

Country	Tractors (thousands)				Hectares per Tractor	
	1938	1948	1949	1950	1938	1949
Austria	1.8 [a]	10.3	12.9	16.0	1,100 [a]	150
Belgium	1.4	3.7	5.3	6.8	750	200
Bulgaria	2.6 [b]	3.3	4.7	5.0	1,600 [b]	900
Czechoslovakia	5.7 [c]	22.0	27.0	29.2	1,050 [c]	200
Denmark	4.0	11.0	16 0	21.7	700	200
Finland	4 0	7.5	10 0	12 0	650	250
France	30.2 [d]	89 0	112 0	135.0	700 [d]	200
Germany :	60.0	75 0	97.0	138.0	300	150
of which western zones		70 0	90 0	126 0	..	100
Soviet Zone	..	5 0	7 0	12 0	..	700
Greece	1.5	2.9	4.0	5.0	1,500	850
Hungary	7.0 [a]	13.3	15 0	18.0	800 [a]	400
Ireland	4 0	12 5	14 8	17.0	300	100
Italy	38.7	52.3	59 0	66 3	350	250
Netherlands	5.0	12 0	15 0	19.0	200	75
Norway	2.8	6.7	8 0	10.0	300	100
Poland	1.5	14.4	15.5	22.0	12,400	1,100
Portugal	1.0	3.0	4.0	5.0	.	..
Rumania	2.0	11.0	12.5	15.2	6,700	750
Spain	10.0	15.0	16.0	16 0	1,600	1,200
Sweden	20.0	42.0	52.0	60.0	200	75
Switzerland	8.2	17.0	18.0	19 5	50	25
Turkey	1.0	3.6	5.6	7.8	7,400	2,650
United Kingdom	55.0	280.0	305.2	325.0	100	25
Yugoslavia	2.3 [d]	6.6	7.2	7.2	3,600 [d]	1,150
Total of countries listed	270.2	714.1	836.7	976.7	600	200

Sources see Appendix B

NOTE — The figures relate to actual territories of the year stated. The number of tractors is related to hectares of arable land

a 1935. *b* 1934. *c* 1936. *d* 1939.

Table XXIV

PRODUCTION OF AGRICULTURAL TRACTORS

Thousands

Country	1937	1948	1949	1950
Austria	0.1	4.1	4 2	5.7
Czechoslovakia	0.2	9.1	9 7	12 0
France	1.7 [a]	12 4	17 3	14.2
Germany : western zones	12 0	7 6 [b]	26.7	57.6
Soviet Zone	4.0	—	0.6	5 0
Hungary	0.7	1.5	3.4	5.1
Italy	2.0 [c]	3.4	7 5	8.0
Poland	—	1.2	2 3	3.7
Rumania	—	0 8	2 2	3.7
Sweden	0.3 [c]	3.9	5.4	7 0
Switzerland	1.3	2 9	1 8	1 2
United Kingdom	17.9	117.0	90 4	120 2
Total of countries listed	40.2	163.9	171 5	243.4

Sources see Appendix B.

[a] 1938 [b] U K /U S Zone. [c] 1934-1938

Table

PRODUCTION IN EASTERN

Index numbers

Industry	BULGARIA	CZECHOSLOVAKIA	GERMANY : SOVIET ZONE	HUNGARY
Mining	Hard coal 111 Lignite 131	Mining industry 105 Hard coal 108 Lignite 104	Hard coal 93 Lignite 108 Iron ore 131 Copper ore 115	Hard coal 112 Lignite 109
Electric power	121	111	..	118
Metals		Metallurgy 109	Pig-iron 135 Crude steel 165 Rolled steel products 219 Electrolytic copper 138 Rolled non-ferrous metal products 109	Iron and steel 118 Castings 142 Rolled steel bars 108 Rolled steel shapes 121 Alumina and aluminium 116
Engineering	Tractor ploughs 359 Tractor disc harrows 377 Tractor sowing machines 192 Threshing machines 245 Combine harvesters 526 Power equipment 155 Electric motors 143 Internal-combustion engines 217 Food-processing machinery 102 Electric bulbs 202	Heavy engineering industry 127 Motor vehicles and aeroplane industry 112 Precision engineering industry 120 General engineering industry 127 Sewing machines 125 Motor cycles 107 Radio sets 110 Electric bulbs 153	Railway wagons 140 Railway carriages 163 Motor lorries 271 Motor cars 204 Motor cycles 226 Bicycles 156 Tractors 22 H P 612 Tractors 40 H P. 602 Electric motors over 10 kW 132 Ball bearings 160	Locomotives 113 Railway wagons 82 Railway carriages 178 Motor lorries 261 Motor buses 247 Motor cycles 126 Bicycles 114 Tractors 151 Tractor cultivators 123 Diesel engines 167 Electric rotating machinery 149 Electric pumps 119 Lathes 196 Radio sets 143 Telephone apparatus 132 Sewing machines 148
Chemicals, etc.	Soap 115 Motor car tyres 159	Chemical industry 105	Sulphuric acid 115 Caustic soda 115 Calcinated soda 110 Phosphorous fertilizers 120 Motor car tyres 155	Artificial fertilizers 142 Machine lubricating oil 173 Soap 121 Matches 120 Motor car tyres 147
Textiles and clothing	Cotton textiles 127 Woollen textiles 137 Silk textiles 146 Cotton knitwear 119 Stockings 120 Leather and rubber footwear 327	Textile and clothing industry 109 Leather and rubber industry 99 Working clothes 120 Men's clothing 135 Women's clothing 141	Artificial silk 122 Textile products 144 All footwear 131 Leather footwear 132	Cotton yarn 115 Cotton textiles 108 Woollen yarn 141 Woollen textiles 112 Silk yarn 103 Silk textiles 117 Hemp and flax yarn 138 Jute yarn 112 Men's clothes 234 Women's clothes 333 Leather shoes 147
Paper and printing	Paper 115	Paper industry 107 Printing industry 124	Paper 116 Cellulose 134	
Food, drink and tobacco	Meat 112 Butter 228 Cheese 108 Gruyere-type cheese 120 Tobacco 111	Food, drink and tobacco industry 125 Bread 151 Processed milk 129 Sugar 118 Fruit and vegetable products 124 Alcohol 123 Beer 111 Cigarettes 120	Flour 113 Meat 179 Vegetable oils 189 Margarine 173	Sugar 125 Sweets 190 Sausage products 195 Spirits 66 Beer 165 Cigarettes 86
Building materials, etc.	Cement 122 Bricks, etc 138 Window glass 103	Building materials and ceramics 108 Glass industry 115	Cement 118 Window glass 112	Cement 144 Plate glass 112 Lime 138 Bricks 206 Refractory bricks 138
Building	Industrial building 150	Total building industry : 137 Industrial building 172 Living space of new dwellings 127 Number of new dwelling units 130		Total building industry 226

Sources . See Appendix B.

XXV

EUROPE AND IN THE U.S.S.R. IN 1950

1949 = 100

POLAND		RUMANIA		YUGOSLAVIA		U.S.S.R.		Industry
Hard coal	105	Hard coal and lignite	110	Production and processing of coal	106	Hard coal and lignite	111	*Mining*
Lignite	105	Iron ore	122	Crude petroleum	138	Crude petroleum	113	
Iron ore	113	Crude petroleum	114			Natural gas	107	
Crude petroleum	107	Methan gas	124					
Rock salt	103							
	117		117		112		116	*Electric power*
Pig-iron	109	Pig-iron	122	Ferrous metals	105	Pig-iron	117	*Metals*
Crude steel	109	Crude steel	122	Non-ferrous metals	112	Crude steel	117	
Rolled steel products	114	Rolled steel products	111			Rolled steel products	116	
Zinc	105					Railway rails	111	
Refined lead	125					Iron pipes	116	
						Copper	110	
						Zinc	117	
						Lead	124	
Locomotives	106	Internal combustion engines	205	Shipbuilding	107	Main line locomotives (elec.)	124	*Engineering*
Railway wagons	102	Electric rotating machinery	200	Electrical engineering	113	Main line goods wagons	117	USSR *(continued)*
Motor lorries	309	Transformers	123			Motor lorries	130	Electric motors
Motor cycles	170	Tractors	169			Motor cars	141	up to 100 kW 120
Bicycles	109	Cement mixers	392			Motor buses	113	above 100 kW 120
Tractors	160	Machine tools	958			Motor cycles	134	Metal-working machine tools 112
Electric switch apparatus and equipment	186	Electric bulbs	115			Bicycles	131	Weaving looms 126
Metal- and wood-working machine tools (in tons)	129	Radio sets	215			Tractors	123	Ball bearings 135
Radio sets	176					Combine harvesters	159	Radio sets 122
						Tractor ploughs	147	Gramophones 108
						Tractor seed drills	185	Sewing machines 122
						Tractor cultivators	167	Clocks and watches 127
						Excavators	128	Cameras 156
						Steam turbines	190	Electric bulbs 128
						Automatic cranes	112	
						Automatic loaders	182	
						Metallurgical equipment	112	
Caustic soda	115	Caustic soda	107	Chemical industry	109	Caustic soda	115	*Chemicals, etc.*
Calcinated soda	105	Sulphuric acid	135			Soda	117	
Nitrate and ammonium nitrate	111	Artificial fertilizers	129			Mineral fertilizers	119	
Sulphuric acid	103	Soap	136			Soap	111	
Soap	132	Motor car tyres	122			Synthetic rubber	118	
Matches	108	Synthetic dyes	146			Motor car tyres	130	
						Synthetic dyes	109	
Cotton textiles	107	Cotton textiles	140	Textile industry	96	Cotton yarn	116	*Textiles and clothing*
Woollen textiles	113	Woollen textiles	127			Cotton textiles	108	
Silk textiles	120	Hemp and flax textiles	190			Linen textiles	125	
Flax and hemp textiles	127	Leather footwear	125			Woollen textiles	103	
Artificial silk	111	Rubber footwear	128			Silk textiles	123	
Leather footwear	127					Hosiery	126	
						Leather footwear	124	
						Rubber footwear	118	
Paper	110	Paper	112	Paper industry	99	Paper	120	*Paper and printing*
Cellulose	105			Printing industry	110			
Flour	117	Flour	142	Food processing industry	90	Meat	135	*Food, drink and tobacco*
Sugar	128	Bread	125	Tobacco industry	92	Sausage products	140	
Sweets	144	Meat	109			Vegetable oils	114	
Wines	157	Preserved meat	211			Butter	107	
Beer	141	Vegetable oils	130			Cheese	129	
Cigarettes	119	Milk	122			Sugar	123	
		Butter	113			Tinned goods	133	
		Cheese	158			Tea	122	
		Sweets	127			Alcohol	106	
		Jam	141			Wines	177	
		Beer	114			Champagnes	138	
		Tobacco	109			Beer	133	
						Cigarettes	116	
Cement	108	Cement	117	Building materials industry	109	Cement	126	*Building materials, etc.*
Window glass	115	Refractory bricks	117			Window glass	106	
Bricks	123					Bricks	124	
Lime	119					Roofing slate	121	
						Roofing felt	118	
						Pre-fabricated houses	119	
Socialized building enterprises		Total building industry	160	Total building industry	95	Dwellings	118	*Building*
Value of output	180							
Employment	150							

Table XXVI

GROSS AND NET NATIONAL INCOME AND INDIRECT TAXES NET OF SUBSIDIES

Billions of national currency units in current prices

Country	Gross National Income at Factor Costs			Net National Income at Factor Costs			Indirect Taxes, Net of Subsidies		
	1948	1949	1950	1948	1949	1950	1948	1949	1950
Austria	28.2	34 3	37.6	25 8	31.7	34.4	1.8	2.5	3.6
Belgium	279	280	300	251	252	270	24 3	24.4	19 [a]
Czechoslovakia	230	280	..	213	260	..	40.7	..	..
Denmark	17.3	18.3	20.8	15.9	16.8	19.1	1.17	1.31	1.56
Finland	341	361	464	306	320	415	54	63	67
France	5,940	7,090	7,930	5,290	6,420	7,280	489	970	1,140
Germany . western zones	66 4 [b]	71 2	76 1	60 0 [b]	64 4	69.6	6.4 [b]	10 6	11.1 [c]
Greece	15,200	20,000	21,800	14,500	19,100	20,800		1,590 [a d]	.
Ireland	0 334	0 351	0 362	0 326	0.342	0.353	0.032	0.036	0 038
Italy	6,550	6,650	7,110	5,940	6,090	6,550	677	792	902
Netherlands	14.7	16.0	17.5	12 9	14.2	15.5	1.35	1.75	2.10
Norway	9.56	10.3	11.1	9 14	9 67	10 3	0.756	0.804	0.926
Poland	2,200	2,330	3,140	1,980	2,200	2,960	.	227 [a]	
Spain	114	120	163	109	114	155	7 8 [a]	8 3 [a]	9.4 [a]
Sweden	24 2	25.3	26 9	22 2	23 2	24 7	1.83	1 88	1 73
Switzerland	19.1	18 4	18 8	17.7	17 0	17 4	0 762	0 820	
Turkey	7.53	7 53	7 68	7.24	7 24	7 38	0.656	0.761 [a]	..
United Kingdom	10.1	10 9	11.4	9 2	9.9	10 4	1.47	1 48	1.60
United States	241	236	257	224	217	236	18	20	23

Sources and methods see Appendix B

a Budget forecasts

b Second half of 1948 at yearly rate.

c First half of 1950 at yearly rate

d 1949/50.

Table XXVII

MOVEMENTS IN THE VOLUME OF IMPORTS AND EXPORTS OF EUROPEAN COUNTRIES

Index numbers — 1949 = 100

Country	Imports										Exports									
	1949 (*millions of dollars, c i.f.*)	1949				1950				1950		*1949 (millions of dollars f o b)*	1949				1950				1950	
		1st qtr.	2nd qtr.	3rd qtr.	4th qtr	1st qtr.	2nd qtr.	3rd qtr.	4th qtr.	*1949 = 100*	*1938 = 100*		1st qtr.	2nd qtr.	3rd qtr.	4th qtr.	1st qtr.	2nd qtr.	3rd qtr.	4th qtr	*1949 = 100*	*1938 = 100*
United Kingdom	8,337	93	102	103	102	97	108	97	97	100	87	6,556	103	97	95	105	113	110	116	125	116	175
Ireland	471	96	100	95	109	108	112	101	119	110	139	215	87	93	105	116	94	98	131	130	113	101
France	3,252	102	106	94	99	112	107	89	118	107	105	2,698	96	102	91	112	116	123	123	179	135	173
Netherlands	1,839	101	99	95	105	123	137	130	137	132	124	1,291	88	86	99	126	111	120	148	170	137	132
Belgium	1,800	96	98	96	110	107	105	102	129	111	111	1,757	103	106	99	92	110	102	88	130	107	104
Switzerland	881	102	94	90	114	100	106	135	155	124	147	803	90	96	99	114	92	100	114	150	114	142
Italy	1,491	102	117	101	81	109	111	105	104	107	126	1,094	95	93	103	108	107	116	128	145	124	105
Spain	457	102	112	100	86	84	116	109	.		.	384	102	104	82	112	128	133	117	.	.	
Turkey	299	88	84	108	119	91	120	125	131	117	146	247	105	98	52	145	94	79	79	139	98	117
Denmark	803	102	105	92	102	127	117	126	137	127	136	663	89	98	93	120	110	120	136	152	129	121
Sweden	1,103	99	96	99	106	107	124	130	142	126	113	1,074	78	98	104	120	111	125	127	142	126	130
Norway	771	93	106	94	106	113	110	86	105	104	121	395	108	103	87	103	131	127	133	137	132	110
Finland [a]	409	83	98	99	119	99	118	97	110	106	83	399	59	85	116	141	74	128	140	99	110	85
Germany : western zones [b]	2,238	79	104	96	121	116	103	132	161	128	101	1,125	84	93	100	122	157	183	222	274	209	94
Austria [c]	410	82	98	103	117	106	101	86	107	100	78	297	101	106	93	101	118	138	142	198	149	108
Poland	633	81	93	103	124	130	133	113			..	679	91	91	102	117	101	104	118	..	.	..
Total Europe [d]	28,788	95	102	98	105	108	112	108	120	112	106	22,631	96	98	96	111	114	117	124	147	125	124

Sources and methods see Appendix B

[a] For comparability with other countries, the seasonal adjustment in the official Finnish index has been eliminated

[b] Estimates for the first three quarters of 1949 have been made for the French Zone since it was not included in the original series for this period

[c] Excluding non-commercial imports.

[d] Including the U.S.S.R. and other European countries not listed.

Table XXVIII

THE COMMODITY COMPOSITION OF EUROPE'S IMPORTS FROM THE UNITED STATES

Millions of dollars in current prices, f.o.b.

Commodity group	1949				1950				1949	1950
	First quarter	Second quarter	Third quarter	Fourth quarter	First quarter	Second quarter	Third quarter	Fourth quarter		
Grain and cereals	282	252	207	171	150	104	87	117	912	458
Fruit and nuts	29	17	11	13	15	11	9	5	70	40
Meat and meat products	4	6	6	4	3	3	4	5	20	15
Dairy products	19	31	16	7	4	6	2	6	73	18
Animal, vegetable fats and oils[a]	51	93	34	39	50	29	26	53	217	158
Tobacco and manufactures	35	32	77	63	21	29	73	80	207	203
Coal and related products	33	41	9	2	1	2	—	5	85	8
Mineral oil and products	58	47	30	26	29	28	21	26	161	104
Steel mill products	38	54	50	21	26	29	24	22	163	101
Copper and manufactures	17	16	8	14	17	14	11	19	55	61
All other metals and manufactures	28	30	20	17	15	16	13	8	95	52
Wood and paper	11	13	10	9	7	8	8	12	43	35
Raw cotton	178	196	76	199	165	185	75	136	649	561
All other textiles, fibres, and manufactures	24	34	20	16	19	24	16	25	94	84
Hides, skins and leather manufactures	16	10	10	8	9	6	5	6	44	26
Rubber manufactures	9	7	6	6	4	5	3	4	28	16
Machinery	117	135	132	136	119	133	117	124	520	493
Vehicles	66	72	50	64	74	54	37	27	252	192
Chemicals and products	57	56	43	41	38	38	37	37	197	150
All other items	79	61	50	54	46	61	38	56	244	201
Total	1,151	1,203	865	910	812	785	606	773	4,129	2,976

Sources The figures have been derived from *United States Exports of Domestic and Foreign Merchandise*, Series No. F T 420, United States Department of Commerce.

NOTE — Data subsequent to June 1950 exclude goods in "special categories" which are not reported by destination in United States trade statistics.

[a] Including oilseeds

Table XXIX

THE COMMODITY COMPOSITION OF EXPORTS FROM EUROPE TO THE UNITED STATES[a]

Millions of dollars in current prices, f.o.b.

	1948				1949				1950			
	First quarter	Second quarter	Third quarter	Fourth quarter	First quarter	Second quarter	Third quarter	Fourth quarter	First quarter	Second quarter	Third quarter	Fourth quarter
Food	32	29	27	38	30	22	21	33	36	34	44	57
Beverages	13	13	13	19	12	14	12	21	13	15	24	29
Tobacco and manufactures	12	14	13	12	11	11	12	10	12	11	12	11
Metals and manufactures	22	27	44	57	71	44	38	33	30	51	72	117
Wood, cork, paper and manufactures	47	39	32	25	23	18	18	29	29	23	24	30
Textiles and manufactures	46	44	47	45	40	26	32	48	55	51	64	82
Leathers, fur and manufactures	16	22	21	16	12	15	17	11	17	15	24	18
Machinery	7	8	6	9	8	5	7	6	5	7	7	11
Vehicles and parts	6	9	10	11	6	3	2	4	4	6	8	10
Chemicals and related products	8	8	9	8	8	6	5	9	11	14	17	33
Clocks and watches	14	14	15	17	12	12	13	14	10	11	15	21
Precious stones and metals, jewellery, etc.	16	17	19	15	10	11	12	13	14	12	19	18
Art works and antiques	4	3	4	4	4	3	4	7	8	4	8	5
All other items	24	27	30	31	26	20	28	28	28	29	42	50
Total	267	274	290	307	273	210	221	266	272	283	380	492

Sources The figures have been taken from *United States Imports of Merchandise for Consumption*, Series No F T 120, United States Department of Commerce

a Exports of the U S S R to the United States are included

Table XXX

TRADE OF EUROPEAN COUNTRIES WITH EUROPE AND WITH OVERSEAS AREAS

Millions of dollars in current prices

Country and period	Trade with	EUROPE			EUROPEAN AFFILIATED AREAS[a]			UNITED STATES AND CANADA			LATIN-AMERICAN REPUBLICS			OTHER OVERSEAS COUNTRIES			TOTAL OVERSEAS COUNTRIES			TOTAL WORLD		
		Imports (c.i.f.)	Exports (f.o.b.)	Balance (f.o.b.)[b]	Imp (c.i.f.)	Exp (f.o.b.)	Balance (f.o.b.)[b]	Imp (c.i.f.)	Exp (f.o.b.)	Balance (f.o.b.)[b]	Imp (c.i.f.)	Exp (f.o.b.)	Balance (f.o.b.)[b]	Imp (c.i.f.)	Exp (f.o.b.)	Balance (f.o.b.)[b]	Imp. (c.i.f.)	Exp (f.o.b.)	Balance (f.o.b.)[b]	Imp. (c.i.f.)	Exp (f.o.b.)	Balance (f.o.b.)[b]
United Kingdom	1949 1st half	1,165	1,057	− 73	1,808	1,770	+ 187	843	264	− 474	318	253	− 25	303	219	− 46	3,272	2,506	− 358	4,437	3,563	− 431
	2nd half	1,167	887	− 237	1,442	1,442	+ 180	803	237	− 465	336	241	− 53	152	186	+ 52	2,733	2,106	− 286	3,900	2,993	− 523
	1950 1st half	1,016	932	− 35	1,430	1,275	+ 24	537	276	− 195	327	203	− 83	225	161	− 35	2,519	1,915	− 289	3,535	2,847	− 324
	2nd half	1,153	960	− 168	1,412	1,420	+ 185	558	394	− 93	374	223	− 105	197	190	+ 18	2,541	2,227	+ 5	3,694	3,187	− 163
France	1949 1st half	456	597	+ 155	707	677	+ 58	381	33	− 301	100	59	− 29	113	57	− 41	1,301	826	− 313	1,757	1,423	− 158
	2nd half	484	543	+ 77	616	540	+ 1	236	32	− 174	88	115	+ 38	71	45	− 17	1,011	732	− 152	1,495	1,275	− 75
	1950 1st half	494	611	+ 141	625	562	+ 15	216	41	− 148	123	106	− 2	110	52	− 45	1,074	761	− 180	1,568	1,372	− 39
	2nd half	432	776	+ 353	679	657	+ 63	185	98	− 64	125	96	− 13	80	61	− 9	1,069	912	− 23	1,501	1,688	+ 330
Netherlands	1949 1st half	574	437	− 120	157	145	+ 8	184	22	− 139	71	16	− 46	18	19	+ 3	430	202	− 174	1,004	639	− 294
	2nd half	492	494	+ 20	131	102	− 12	132	22	− 94	65	20	− 37	15	14	+ 2	343	158	− 141	835	652	− 121
	1950 1st half	575	457	− 90	176	91	− 64	139	19	− 103	61	17	− 36	38	24	− 9	414	151	− 212	989	608	− 302
	2nd half	639	568	− 58	210	112	− 71	107	48	− 46	71	37	− 25	53	31	− 16	441	228	− 158	1,080	796	− 216
Belgium-Luxembourg	1949 1st half	488	668	+ 195	159	119	− 20	189	66	− 100	72	66	+ 2	17	37	+ 22	437	288	− 96	925	956	+ 99
	2nd half	460	554	+ 112	138	101	− 21	189	47	− 119	71	73	+ 11	17	26	+ 11	415	247	− 118	875	801	− 6
	1950 1st half	462	546	+ 106	164	84	− 59	170	69	− 80	66	50	− 8	25	33	+ 12	425	236	− 135	887	782	− 29
	2nd half	564	580	+ 29	196	83	− 89	195	94	− 77	76	62	− 4	32	43	+ 14	499	282	− 156	1,063	862	− 127
Switzerland	1949 1st half	252	228	− 17	34	37	+ 8	118	49	− 55	31	47	+ 20	21	19	+ 1	204	152	− 26	456	380	− 43
	2nd half	246	263	+ 26	27	27	+ 3	97	62	− 22	34	50	+ 21	21	21	+ 3	179	160	+ 5	425	423	+ 31
	1950 1st half	247	242	+ 7	33	23	− 6	74	54	− 12	38	42	+ 9	22	20	+ 1	167	139	− 8	414	381	− 1
	2nd half	366	322	− 36	58	35	− 16	102	82	− 8	63	56	+ 1	48	31	− 11	271	204	− 34	637	526	− 70
Italy	1949 1st half	256	288	+ 40	118	95	− 9	317	25	− 252	85	107	+ 32	61	48	− 5	581	275	− 234	837	563	− 194
	2nd half	238	315	+ 86	90	72	− 6	209	25	− 158	67	82	+ 24	50	37	− 7	416	216	− 147	654	531	− 61
	1950 1st half	298	332	+ 49	87	68	− 8	198	28	− 146	80	71	+ 1	61	34	− 19	426	201	− 172	724	533	− 123
	2nd half	283	377	+ 100	120	117	+ 12	142	55	− 70	78	61	− 8	89	46	− 32	429	279	− 98	712	656	+ 2

Denmark	1949	1st half	337	306	− 21	9	10	+ 2	83	4	− 68	14	3	− 10	5	7	+ 2	111	24	− 74	448	330	− 95
		2nd half	279	307	+ 38	9	10	+ 3	51	5	− 40	9	6	− 2	7	5	− 1	76	26	− 40	355	333	− 2
	1950	1st half	330	265	− 49	13	9	− 2	44	5	− 34	8	7	+ 1	10	5	− 4	75	26	− 39	405	291	− 88
		2nd half	382	324	− 50	10	13	+ 5	42	9	− 28	17	11	− 3	12	8	− 3	81	41	− 29	463	365	− 79
Sweden	1949	1st half	394	399	+ 18	67	45	− 13	58	26	− 25	45	41	+ 2	25	22	0	195	134	− 36	589	533	− 18
		2nd half	339	404	+ 77	58	36	− 16	54	37	− 10	36	45	+ 13	27	19	− 5	175	137	− 18	514	541	+ 59
	1950	1st half	343	362	+ 36	56	37	− 13	54	31	− 16	47	43	+ 2	28	17	− 8	185	128	− 35	528	490	+ 1
		2nd half	444	448	+ 13	71	48	− 15	54	41	− 6	51	60	+ 16	31	17	− 10	207	166	− 15	651	614	− 2
Norway	1949	1st half	297	177	− 111	26	20	− 3	70	15	− 46	13	7	− 4	13	6	− 5	122	48	− 58	419	225	− 169
		2nd half	260	126	− 124	18	14	− 2	55	13	− 36	10	8	− 1	9	9	+ 2	92	44	− 37	352	170	− 161
	1950	1st half	252	135	− 106	32	12	− 16	48	17	− 25	13	10	− 1	14	7	− 6	107	46	− 48	359	181	− 154
		2nd half	213	151	− 57	24	15	− 6	47	22	− 18	18	13	− 3	14	8	− 4	103	58	− 31	316	209	− 88
Germany : western zones	1949	1st half	387	459	+ 84	123	32	− 76	426	28	− 345	60	12	− 40	57	12	− 37	666	84	− 498	1,053	543	− 414
		2nd half	496	483	+ 6	135	39	− 79	410	26	− 332	92	21	− 60	52	13	− 32	689	99	− 503	1,185	582	− 497
	1950	1st half	592	634	+ 71	207	45	− 136	215	30	− 158	75	45	− 21	32	25	− 3	529	145	− 318	1,121	779	− 247
		2nd half	893	867	− 7	297	98	− 162	226	83	− 115	110	109	+ 13	57	46	− 4	690	336	− 268	1,583	1,203	− 275
Finland	1949	1st half	155	136	− 14	11	5	− 4	17	16	+ 1	19	12	− 4	2	4	+ 2	49	37	− 5	204	173	− 19
		2nd half	161	189	+ 34	12	6	− 5	15	14	+ 1	13	9	− 3	4	8	+ 5	44	37	− 2	205	226	+ 32
	1950	1st half	131	108	− 17	11	6	− 3	12	16	+ 5	18	7	− 9	4	4	+ 1	45	33	− 6	176	141	− 23
		2nd half	165	165	+ 3	14	11	− 1	12	18	+ 7	18	11	− 4	3	8	+ 6	47	48	+ 8	212	213	+ 11
Eastern European countries [c]	1949	1st half	1,552	1,539	+ 34	71	37	− 25	53	44	− 3	24	20	− 1	44	36	− 2	192	137	− 31	1,744	1,676	+ 3
		2nd half	1,533	1,514	+ 38	70	39	− 23	46	47	+ 7	24	20	− 1	38	38	+ 5	178	144	− 12	1,711	1,658	+ 26
	1950	1st half	1,697	1,651	+ 35	62	20	− 34	45	53	+ 13	19	6	− 11	51	70	+ 25	177	149	− 7	1,874	1,800	+ 28
		2nd half	1,713	1,683	+ 7	62	20	− 34	41	52	+ 16	19	6	− 11	51	70	+ 26	173	148	− 3	1,886	1,831	+ 4
Other European countries [d]	1949	1st half	724	533	− 170	164	87	− 57	356	66	− 246	108	24	− 71	38	43	+ 10	666	220	− 364	1,390	753	− 534
		2nd half	665	489	− 153	153	87	− 48	347	49	− 255	77	28	− 39	44	36	− 3	621	200	− 345	1,286	689	− 498
	1950	1st half	603	427	− 148	141	87	− 37	289	76	− 177	48	27	− 15	66	33	− 25	544	223	− 254	1,147	650	− 402
		2nd half	707	562	− 129	147	90	− 38	221	105	− 88	56	44	− 6	66	46	− 11	490	285	− 143	1,197	847	− 272
Total Europe	1949	1st half	7,037	6,824	—	3,454	3,079	+ 56	3,095	658	−2,053	960	667	− 174	717	529	− 96	8,226	4,933	−2,267	15,263	11,757	−2,267
		2nd half	6,820	6,568	—	2,899	2,515	− 25	2,644	616	−1,697	922	718	− 89	507	457	+ 15	6,972	4,306	−1,796	13,792	10,874	−1,796
	1950	1st half	7,040	6,702	—	3,037	2,319	− 339	2,041	715	−1,076	923	634	− 173	686	485	− 115	6,687	4,153	−1,703	13,727	10,855	−1,703
		2nd half	7,954	7,783	—	3,300	2,719	− 167	1,932	1,101	+ 50	1,076	789	− 152	733	605	− 36	7,041	5,214	− 945	14,995	12,997	− 945

Sources and methods see Appendix B

[a] Overseas sterling area and dependent overseas territories

[b] Trade balances are computed after adjusting imports to an approximate f o b basis. In intra-European trade, this adjustment is calculated from the differences between the c i f values as reported by importing countries and the f o b values as reported by exporting countries. In imports from overseas areas, the adjustment is made by a uniform deduction of 12 5 per cent from the c i f figures as reported.

[c] Bulgaria, Czechoslovakia, the Soviet Zone of Germany, Hungary, Poland, Rumania, Yugoslavia and the U S S R

[d] Austria, Greece, Iceland, Ireland, Portugal, Spain and Turkey.

Table

BALANCE OF PAYMENTS OF EUROPE AND

Millions of

Item	Year	European Currency Area					
		Europe			Overseas sterling area [a]	Dependent overseas territories [b]	Total European currency area
		United Kingdom	Other European countries	Total Europe			
A. Goods and services (total)	1948	− 298	−3,381	−3,679	− 448	− 97	−4,224
	1949	− 309	−2,857	−3,166	− 383	− 137	−3,686
	1950	+ 13	−1,722	−1,709	+ 385	+ 52	−1,272
Merchandise trade balance	1948	− 258	−3,285	−3,543	− 276	− 67	−3,886
	1949	− 405	−2,868	−3,273	− 222	− 91	−3,586
	1950	− 176	−1,924	−2,100	+ 534	+ 73	−1,493
Exports to the United States	1948	403	1,009	1,412	1,037	318	2,767
	1949	320	853	1,173	883	335	2,391
	1950	345	1,150	1,495	1,265	303	3,063
Imports from the United States	1948	661	4,294	4,955	1,313	385	6,653
	1949	725	3,721	4,446	1,105	426	5,977
	1950	521	3,074	3,595	731	230	4,556
Services (net)	1948	− 40	− 96	− 136	− 172	− 30	− 338
	1949	+ 96	+ 11	+ 107	− 161	− 46	− 100
	1950	+ 189	+ 202	+ 391	− 149	− 21	+ 221
B. Private donations and capital movements (total)	1948	+ 42	+ 694	+ 736	+ 94	+ 15	+ 845
	1949	+ 18	+ 244	+ 262	+ 95	+ 11	+ 368
	1950	+ 70	+ 139	+ 209	+ 89	+ 11	+ 309
Private donations	1948	+ 40	+ 389	+ 429	+ 20	+ 2	+ 451
	1949	+ 32	+ 353	+ 385	+ 14	—	+ 399
	1950	+ 27	+ 285	+ 312	+ 16	+ 1	+ 329
Private United States capital	1948	+ 26	+ 96	+ 122	+ 65	+ 14	+ 201
	1949	+ 57	− 101	− 44	+ 82	+ 11	+ 49
	1950	+ 129	+ 144	+ 273	+ 76	+ 11	+ 360
Foreign long-term capital [d]	1948	− 24	+ 209	+ 185	+ 9	− 1	+ 193
	1949	− 71	− 8	− 79	− 1	—	− 80
	1950	− 86	− 290	− 376	− 3	− 1	− 380
C. Surplus or deficit on goods and services, private donations and capital movements (A + B)	1948	− 256	−2,687	−2,943	− 354	− 82	−3,379
	1949	− 291	−2,613	−2,904	− 288	− 126	−3,318
	1950	+ 83	−1,583	−1,500	+ 474	+ 63	− 963
D. Official financing (total)	1948	+1,481	+3,200	+4,681	+ 541	− 7	+5,215
	1949	+1,548	+3,409	+4,957	+ 153	+ 16	+5,126
	1950	− 285	+2,184	+1,899	− 15	− 39	+1,845
United States Government grants	1948	+ 475	+2,669	+3,144	− 4	—	+3,140
	1949	+ 981	+3,183	+4,164	+ 1	—	+4,165
	1950	+ 660	+2,606	+3,266	+ 4	—	+3,270
United States Government credits	1948	+ 494	+ 483	+ 977	+ 1	− 2	+ 976
	1949	+ 67	+ 493	+ 560	+ 1	+ 1	+ 562
	1950	− 19	+ 149	+ 130	− 4	+ 4	+ 130
Foreign short-term balances in the United States [e]	1948	− 228	− 140	− 368	+ 27	+ 9	− 332
	1949	+ 54	− 49	+ 5	− 44	+ 36	− 3
	1950	+ 94	− 247	− 153	− 27	− 36	− 216
Monetary gold movements [e]	1948	+ 740	+ 188	+ 928	+ 517	− 14	+1,431
	1949	+ 446	− 218	+ 228	+ 195	− 21	+ 402
	1950	−1,020	− 324	−1,344	+ 12	− 7	−1,339
E. Errors, omissions and multilateral settlements [f]	1948	−1,225	− 513	−1,738	− 187	+ 89	−1,836
	1949	−1,257	− 796	−2,053	+ 135	+ 110	−1,808
	1950	+ 202	− 601	− 399	− 459	− 24	− 882

Sources Derived from *Survey of Current Business*, United States Department of Commerce, June 1950, and from data for 1950 furnished directly by the Balance of Payments Division, United States Department of Commerce.

NOTE — The signs are reversed as compared with the original source in order to present the data from the standpoint of Europe and other areas specified rather than from that of the United States For important qualifications affecting certain items in the table (the inclusion and exclusion of "special category" exports and transactions under the Mutual Defense Assistance Program), see Appendix B

a Including the dependent overseas territories of the United Kingdom

b Excluding the dependent overseas territories of the United Kingdom and Spain

c Including the dependent overseas territories of Spain.

XXXI

OTHER AREAS WITH THE UNITED STATES

current dollars

Canada	Latin-American republics	All other areas [c]	International institutions	TOTAL WORLD	Year	Item
− 441	−1,173	− 863	− 35	−6,736	1948	A. Goods and services (total)
− 549	− 657	−1,317	− 32	−6,241	1949	
− 271	− 271	− 358	− 37	−2,209	1950	
− 326	− 518	− 857	− 7	−5,594	1948	Merchandise trade balance
− 363	− 202	−1,069	+ 27	−5,193	1949	
− 59	+ 368	− 228	+ 20	−1,392	1950	
1,612	2,644	795	15	7,833	1948	Exports to the United States
1,567	2,503	653	30	7,144	1949	
1,948	3,084	1,171	21	9,287	1950	
1,938	3,162	1,652	22	13,427	1948	Imports from the United States
1,930	2,705	1,722	3	12,337	1949	
2,007	2,716	1,399	1	10,679	1950	
− 115	− 655	− 6	− 28	−1,142	1948	Services (net)
− 186	− 455	− 248	− 59	−1,048	1949	
− 212	− 639	− 130	− 57	− 817	1950	
+ 177	+ 344	+ 327	+ 6	+1,699	1948	B. Private donations and capital movements (total)
+ 128	+ 377	+ 217	− 65	+1,025	1949	
− 34	+ 163	+ 196	− 106	+ 528	1950	
+ 4	+ 24	+ 168	+ 5	+ 652	1948	Private donations
+ 10	+ 16	+ 88	+ 2	+ 515	1949	
− 2	+ 10	+ 92	+ 10	+ 439	1950	
+ 197	+ 330	+ 141	+ 8	+ 877	1948	Private United States capital
+ 81	+ 365	+ 122	+ 19	+ 636	1949	
+ 453	+ 185	+ 91	+ 1	+1,090	1950	
− 24	− 10	+ 18	− 7	+ 170	1948	Foreign long-term capital [d]
+ 37	− 4	+ 7	− 86	− 126	1949	
− 485	− 32	+ 13	− 117	−1,001	1950	
− 264	− 829	− 536	− 29	−5,037	1948	C. Surplus or deficit on goods and services, private donations and capital movements (A + B)
− 421	− 280	−1,100	− 97	−5,216	1949	
− 305	− 108	− 162	− 143	−1,681	1950	
− 437	+ 50	+ 733	+ 488	+6,049	1948	D. Official financing (total)
− 59	− 273	+1,145	+ 253	+6,192	1949	
− 123	− 274	+ 176	+ 57	+1,681	1950	
+ 5	+ 17	+ 883	+ 116	+4,161	1948	United States Government grants
+ 10	+ 31	+ 994	+ 104	+5,304	1949	
+ 6	+ 26	+ 740	+ 91	+4,133	1950	
—	− 53	− 19	+ 3	+ 907	1948	United States Government credits
+ 1	+ 39	+ 21	+ 20	+ 643	1949	
+ 1	− 2	+ 10	+ 20	+ 159	1950	
− 365	− 93	− 127	+ 368	− 549	1948	Foreign short-term balances in the United States [e]
− 80	− 212	+ 186	+ 190	+ 81	1949	
− 31	− 136	− 489	+ 4	− 868	1950	
− 77	+ 179	− 4	+ 1	+1,530	1948	Monetary gold movements [e]
+ 10	− 131	− 56	− 61	+ 164	1949	
− 99	− 162	− 85	− 58	−1,743	1950	
+ 701	+ 779	− 197	− 459	−1,012	1948	E. Errors, omissions and multilateral settlements [f]
+ 480	+ 553	− 45	− 156	− 976	1949	
+ 428	+ 382	− 14	+ 86	−	1950	

d Official and private

e A plus sign indicates a withdrawal of funds from foreign dollar balances in the United States or the sale of gold to the United States, and a minus sign indicates the acquisition of such assets

f A minus figure in these rows represents an excess of (a) estimated dollar funds obtained from the United States (including receipts through drawings on dollar balances and sale of gold) over (b) the estimated amounts required for payments of all types to the United States The difference indicates the net effect of (a) errors and omissions, and (b) dollar transfers to other areas The final figures in this item under "total world" indicate the net effect of all errors and omissions in the global balance of payments of the United States.

Table XXXII

STERLING AREA EXPORTS OF SELECTED COMMODITIES TO THE UNITED STATES

Millions of current dollars and quantities

Commodity	Principal exporting countries	Unit	Quantity					Value				
			1938	1948	1949	1950 [a]		1938	1948	1949	1950 [a]	
						First half	Second half				First half	Second half
Rubber . .	British Malaya, Ceylon	Million lbs	617.6	1144 6	793 3	928.5	996.1	86.0	218.6	132.1	164.5	337.5
Wool . .	Australia, New Zealand, Union of South Africa, India, Pakistan	Million lbs (*clean basis*)	21.0	161.6	104.7	184 3	159.1	7.2	142.0	108.2	165.3	180.6
Jute and manufactures . .	India, Pakistan	Million lbs	608.3	695 9	592.3	549 3	596.6	31.2	163.0	133.1	99.5	118.0
Tin . .	British Malaya	Million lbs	82.1	76 9	77.0	129.9	107.8	33.0	71.7	77.3	95.4	96.9
Diamonds	Union of South Africa	Million carats	1.2	8.8	4.2	4.1	5 7	10.0	77.1	46 9	66.4	86.1
Cocoa .	British West Africa, British West Indies	Million lbs	157.4	268.9	301.8	478.5	171.8	6.6	94.3	67.8	100.7	50.8
Petroleum and products . . .	Kuwait, Trinidad, Bahrein, Iraq	Million barrels	—	9.7	25.0	27 8	33.1	—	16 0	42.2	44.1	53.4
Tea	Ceylon, India	Million lbs	34.3	73.2	64 9	90 4	79.8	10.1	38.0	33.6	44.5	38.3
Manganese ore	Union of South Africa, India, Pakistan, Gold Coast	Million lbs (*metal content*)	192.0	791.7	884.7	1439.8	1426.5	1.8	11.0	16.2	31.2	31.1
Hides and skins .	India, Pakistan, Australia, New Zealand, Nigeria, Union of South Africa	Million pieces	23.7	33.7	33.7	21 8	23.9	9.0	37.0	30.3	21.0	23.8
Copper, raw .	Northern and Southern Rhodesia, Union of South Africa, British Malaya	Million lbs (*metal content*)	13.1	49.3	75.5	129.4	83.8	1 2	9.2	13.9	20.0	20.5
Furs .	Australia, New Zealand, Union of South Africa	Million pieces	.	15 7	11.2	3.9	10.4	4.4	29.5	17.0	2 8	12.7
Lead, raw	Australia	Million lbs (*metal content*)	0.5	60.9	36.7	31 6	57.2	—	9.9	6 3	3.2	6.3
All other . . .			..	.	..	..	..	54.6	188.0	196.4	252.4	328.2
Total . .	. .	. . . .						255 1	1105.3	921 3	1111.0	1384.2

Sources. *United States Imports of Merchandise for Consumption*, Series No. F T 120, United States Department of Commerce.

[a] Annual rate

Table XXXIII

INDEX NUMBERS OF WHOLESALE PRICES

Country	*1938 = 100*				*1948 = 100*																
	1947	1948	1949	1950	1949		1950												1951		
					Sept.	Dec.	Jan.	Feb.	Mar	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Austria [a]	296 [b]	326	418	553	133	154	156	160	164	161	162	159	175	169	173	184	185	187	194	201	206
Belgium	357	391	372	391	93	94	94	94	93	93	94	94	97	102	107	109	110	113	117	121	123
Denmark	207	227	233	262	101	106	109	110	111	111	112	111	112	115	118	120	125	129	134	138	142
Finland	724	956	963	1,110	103	104	105	105	107	108	111	114	117	118	122	126	127	132	146	150	155
France [c]	989	1,712	1,917	2,076	..	..	116	115	117	117	117	116	119	120	125	127	131	135	138	146	150
Germany :																					
U.K./U.S. Zone [d]	..	184 [e]	185	183	99	98	99	98	97	97	96	96	97	98	100	101	102	106	111	115	118
Greece	18,320	25,620	30,300	31,460	118	120	121	124	120	118	115	115	119	123	123	127	133	136	140	144	..
Ireland [f]	219	232	231	244	98	102	102	103	103	104	103	104	105	105	105	108	110	113	115	116	..
Italy	5,159	5,443	5,169	4,905	90	87	87	87	87	86	86	86	86	90	93	95	97	100	104	106	105
Netherlands [g]	265	275	289	322	103	110	111	114	114	113	113	115	115	117	120	122	125	128	135	139	144
Norway	175	181	184	209	102	103	103	104	104	112	112	113	115	119	123	125	126	127	129	134	135
Portugal	241	240	246	243	103	102	103	103	102	105	102	101	101	99	99	99	100	100	102	110	..
Spain [h]	421	451	483	570	108	113	112	114	114	119	117	119	122	128	133	142	146	150	158	159	..
Sweden	179	193	195	205	101	102	102	103	103	103	103	104	105	105	107	107	114	118	124	128	134
Switzerland	209	217	206	203	94	92	91	90	90	90	91	91	92	95	96	98	100	101	104	106	107
Turkey	433	466	503	452	106	103	103	103	101	99	95	92	90	90	93	96	99	101	104	.	..
United Kingdom	189	216	227	259	105	110	111	112	112	114	116	117	118	120	124	127	132	133	137	139	143
United States	193	210	197	205	93	92	92	92	93	93	95	95	99	101	102	102	104	106	109	111	112

Sources and methods see Appendix B

a Yearly averages are based on March 1938 = 100
b Fourth quarter 1947
c From January 1950 new series See Appendix B
d Producers' prices of industrial products, monthly figures are based on 1949 = 100
e Average June to December 1948
f Yearly averages are based on October 1938 = 100
g From 1949, new series See Appendix B
h Yearly averages are based on 1936 = 100

Table XXXIV

INDEX NUMBERS OF THE COST OF LIVING

Country	*1938 = 100*				*1948 = 100*															
	1947	1948	1949	1950	1949		1950											1951		
					Sept.	Dec	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct	Nov	Dec.	Jan.	Feb.	March
Austria	211	321	411	465	136	148	147	143	141	139	137	141	142	139	143	153	156	158	162	163	168
Belgium	293	352	342	339	97	97	96	96	95	94	94	94	93	96	100	100	99	98	101	102	104
Denmark	163	166	168	176	101 [a]	..	103	..	.	105	.	..	106	.	.	109		.	113	..	117 [b]
Finland	590	795	808	921	103	105	106	107	108	109	111	119	119	118	119	122	125	127	131	131	132
France	.	1,580	1,817	2,020	115	121		.	124	.		123		.	130	.	..	135	137	139	142
Germany ·																					
U.K./U.S Zone [c]	..	161 [d]	160	151	97	97	96	96	95	95	97	94	93	92	92	93	93	94	96	97	100
Greece	17,500	24,700	28,370	30,600	115	115	120	123	122	118	118	119	124	125	126	130	130	131	133	136	142
Iceland [e]	408	415	428	511	103	107	108	109	110	112	116	121	127	128	129	135	140	141	142	144	..
Ireland	177	183	185	187	101 [f]	101 [g]		101	.	.	103		.	101	.	.	103	..		.	..
Italy	4,575	4,844	4,985	4,854	101	98	98	98	97	98	98	100	100	101	103	102	103	103	105	107	107
Luxembourg	276	293	310	322	111	110	110	109	109	108	108	108	108	110	111	113	113	114	113	115	117
Netherlands [h] [i]	199	205	219	239	105	110	112	114	114	115	116	115	115	116	119	121	121	121	121	123	
Norway [j]	160	159	159	167	101	100	101	101	101	104	105	105	105	105	108	109	111	112	113	114	115
Poland .	12,500	13,200		..	102	107	112	113	111	114	113	113	115	..	113	113	114	..	.	..	..
Portugal [k]	211	205	213	213	106	105	108	106	105	110	104	101	101	103	102	102	102	103	105	106	.
Spain [l]	424	453	478	529	106	110	113	114	115	115	115	115	115	116	118	120	122	124	126	128	..
Sweden	147	154	157	159	102	102	.	.	102	.	.	102			103	.	.	105	..	.	115
Switzerland [j]	158	163	162	159	99	99	98	97	97	97	97	97	97	98	98	99	99	99	100	100	100
Turkey . .	326	330	355	340	108	108	109	110	109	108	108	103	99	98	97	98	99	100	101	..	..
United Kingdom	170	181	185	191	104	105	105	105	105	106	105	105	105	105	105	106	107	107	108	109	110

Sources see Appendix B

a October 1949

b April 1951

c Monthly index numbers are based on 1949 = 100

d Average, June to December 1948

e Yearly averages are based on first quarter 1939 = 100

f August 1949

g November 1949

h Yearly averages are based on 1938/39 = 100

i From January 1950 new series , see Appendix B.

j From March 1950 new series , see Appendix B

k Yearly averages are based on July 1938-June 1939 = 100.

l Yearly averages are based on July 1936 = 100

Table XXXV

EARNINGS IN INDUSTRY

Index numbers—yearly average 1948 = 100

Country	Nominal Hourly Earnings												Real Hourly Earnings [a]											
	1948				1949				1950				1948				1949				1950			
	March	June	Sept.	Dec.	March	June	Sept	Dec	March	June	Sept	Dec	March	June	Sept.	Dec	March	June	Sept	Dec	March	June	Sept	Dec
Austria		.			112	124	126	130	130[b]	131	132	155[c]				..	99	92	92	88	93[b]	93	92	99[c]
Belgium	98	100	102	104	105	106	106	107	107	109	111	115	100	99	99	103	109	103	109	110	113	116	111	118
Denmark [d]	96	100	101	103	103	104	105	106	105	110	110 4	112	97	100	100	102	101	103	104	104	101	104	103	101
Finland [d]	92	101	104	104	104	105	107	108	108	119	133[e]	143[e]	95	103	100	101	104	106	103	102	101	105	112[e]	115[e]
France	93[c]	97	106	112	113	114	115	116	121	123	132	139	..		..	.	100	102	100	96	98	100	102	103
Germany U K./U S Zone[f]	82	83	90	96	97	101	102	103	104	105	109	114	.	88	91	91	93	102	105	106	109	112	118	121
Ireland [g]	.	.					.		107	108	107	.	.		.	..	.	.		.	105	104	106	..
Italy	99	100	101	102	102	104	104	106	106	107	106	110[e]	98	100	100	101	99	101	103	108	109	108	103	107[e]
Netherlands [h]	99	100	100	103	103	103	103	103	108	108	114	114	100	99	101	101	97	95	98	94	95	94	96	94
Norway [d]	97	99	101	103	102	106	105	107	106	111	110	118[e]	97	100	102	104	103	106	104	107	104	106	104	107[e]
Sweden [c]	97	101	101	102	103	104	105	105	106	109	109	111	98	100	100	100	101	103	102	102	104	107	107	108
Switzerland [h]	100	100	101	101	101	101	101	101	101	101	102	102	100	100	101	101	102	102	102	102	102	104	104	103
United Kingdom [b]	99	.	101	.	103	.	105	.	106		109	113[e]	99		101	.	102	.	101		100		103	104[e]

Note — The index numbers relate generally to hourly earnings in manufacturing, public utilities and building

[a] Nominal hourly earnings deflated by cost-of-living index
[b] Month following that quoted
[c] Month preceding that quoted
[d] Quarter ending in the quoted month
[e] Provisional
[f] Yearly average 1949 = 100
[g] October 1948 = 100
[h] Hourly wage rates

APPENDIX B

NOTES ON SOURCES AND METHODS

I. GENERAL REMARKS

The statistics shown in the *Economic Survey of Europe* are to be regarded in the first place as background material for economic analysis given in the various chapters They are therefore somewhat different in nature from statistics normally published in statistical yearbooks and other publications of a purely statistical nature. First, when no official figures are available, it is often preferable to have an estimate rather than no figure at all Consequently, estimated figures are sometimes shown in the various tables which have a wider margin of error than is usually allowed in statistical publications. In the second place, the available national statistics have, for the sake of comparability as between countries, often been adjusted to more uniform definitions. For this reason, the figures shown differ in many instances from those given in national publications, or other publications of the United Nations and its specialized agencies The most important differences are explained in detail in the following notes. Finally, the methods of compilation have been chosen with a view to the special use for which the data are intended. This does not necessarily mean that for other purposes other methods might not have been preferable.

In many instances, figures differ from those published in last year's SURVEY. The most important revisions are commented upon in the following sections. In a number of other cases, the revisions made are of only minor importance, and are due largely to changes in national statistics. No explanations are given below of this second kind of revision.

Where a table gives totals for a number of countries, these totals always refer to the same group of countries for each period shown. In cases where figures for a given country are not available for one or more periods, estimates of these missing figures are included in the totals. Totals labelled "European totals" always include estimates for those countries for which no data are available. Details of the most important estimates are given below

Slight discrepancies between constituent items and the totals shown in the tables are due to rounding

The tables include information received up to 20 April 1951. In general, the most recent figures are to be regarded as provisional, and subject to revision.

II. INDEX NUMBERS OF INDUSTRIAL PRODUCTION (TABLES 9, 19, 21, I, II AND III)

1. GENERAL

The index numbers of industrial production, both for total output and for individual industries, have generally been derived from the official and semi-official sources listed below. In a few cases, the indices have been obtained from private publications In many instances, however, the original index numbers were adjusted to obtain a coverage more comparable as between countries, and in numerous cases the base year was shifted from the original base to 1938 for the annual index numbers, and to 1948 for the quarterly indices.

In spite of these adjustments, however, full comparability as between countries has not been obtained. The following discrepancies should be mentioned in particular :

Pre-war and Post-war Weights

While most European countries still calculate their production indices on the basis of pre-war weights, a few countries have revised their weighting systems and are now using post-war weights. In these cases (Czechoslovakia, Denmark, Finland, Luxembourg, Norway, Sweden and the United Kingdom), the new index numbers have been adopted for the post-war period. However, the link to 1938 is generally available on the basis of pre-war weights only, except in the case of the United Kingdom, for which the level of output in 1946 (the post-war base year) in relation to 1938 is available according to both pre-war and post-war weights. For this reason, the link between 1938 and the post-war years used is, in all cases (including the United Kingdom), based on pre-war weights. Owing to a general tendency for changes in relative costs between pre-war and post-war to be negatively correlated with changes in relative output, the use of post-war weights for all countries would considerably lower the European total in relation to 1938. The use of post-war weights for the United Kingdom alone would lower the European index by 2 points in the post-war period.

Indices of Net and Gross Output

Although the most common method of computing production index numbers is that of weighting indices of physical output for individual commodities according to their net production value in the base year, the countries of eastern Europe, except Czechoslovakia, calculate their index numbers by evaluating current output at fixed prices. Such index numbers therefore relate to gross rather than net output. Both methods would yield similar results if the second were limited to final production, but little is known as to details of the procedure used in eastern countries. To the extent that the prices at which current output is valued are changed at the beginning of a new plan period, the index numbers calculated by the second method are not comparable with those obtained by the first method, which are computed by the use of constant weights.

Adjustment for a Variable Number of Working-days in each Month and for Seasonal Fluctuations

Although index numbers adjusted to the same number of working-days in each month have been used wherever available, unadjusted indices had to be used for certain countries (Finland, Greece, Ireland, Italy, Poland, Portugal, Saar, Spain and Turkey) in the absence of any adjusted series. However, it may be estimated that, were adjusted indices available and employed for all the countries, the European total would be unlikely to be altered by more than 1 point since only quarterly indices are shown in the tables and variations in the number of working days per quarter are relatively small.

As regards seasonal variations, none of the index numbers for European countries appear to be completely adjusted in that respect, although in the case of certain countries (e.g. Belgium ; Sweden up to 1948) partial adjustments are applied. Essentially, however, the indices shown should be considered as unadjusted for seasonal fluctuations.

Pre-war and Post-war Territory

In general, no account has been taken of shifts in territory as between pre-war and post-war periods, except for Poland, where the change involves a region which is important from an industrial point of view. Since the official index numbers for Poland relate post-war production in the post-war territory to pre-war production in the pre-war territory, an adjustment has been made in calculating the European totals as a result of which the latter refer to constant (post-war) territories for both pre-war and post-war years.

Alternative Indices for Countries of Eastern Europe

Apart from the lack of comparability between index numbers for western and eastern European countries, which is due to different methods of computation, as noted above, another difficulty arises from the fact that for several countries of eastern Europe the official index numbers of industrial production relating to the earlier post-war years have recently been replaced by new indices which show considerable differences as regards both the course and level of output. While in all cases the index numbers of general industrial production used in Table 9 have been taken from the most recent sources, the discrepancies between the old and the new index numbers are such that they cannot be left unmentioned. These discrepancies are described in the following notes.

Czechoslovakia The index number currently published is based on 1948, covers 298 commodities and is weighted by net values. A recent article in *Statistický Obzor* indicates that the coverage of the index is being gradually increased although the number of commodities considered is the same when comparing two corresponding periods of successive years The new index shows the production level in 1949 as exceeding the 1948 level by 15 8 per cent, whereas according to the old index (which was calculated with 1937 weights on the base 1937 = 100 and included 91 commodities) the increase from 1948 to 1949 was only 8 per cent.

Hungary The annual index numbers which have been included in Table 9 have been taken from several official publications listed in the notes below. However, the index for 1949 to which the index for 1950 has been linked, is subject to some doubt, on account of a statement by Minister Gerő reported in *Szabad Nép*, 10 December 1949. According to this statement, the level of production had at that time already reached 140 per cent of pre-war, in comparison with a planned level of 127 (1938 = 100). The annual index for 1949 is 153 (1938 = 100). For the figure 140 (which presumably relates either to a period covering less than 12, say, or 10 to 11, months of the year 1949, or even to a single month late in that year) to be consistent with the annual index of 153, production must have risen so sharply at the end of 1949 as to suggest that some revision has taken place.

Poland . The most recent index number of gross production which is based on the year 1937 = 100 shows an increase from 105.8 to 145 7, or 38 per cent, from 1947 to 1948. The index of net production, formerly published by the Polish Institute for Economic Research which was based on the year 1938 = 100, gave the level of output in 1947 and 1948 as 104 and 134 respectively—an increase of 29 per cent.

2. Sources of General Index Numbers (Table 9)

The general index numbers cover manufacturing, mining, and gas, water and electricity supply, but exclude building. The following table describes the coverage of the general index numbers shown in Table 9 and includes industries which have been added by the Research and Planning Division.

Table A

COVERAGE OF THE GENERAL INDEX NUMBERS OF INDUSTRIAL PRODUCTION

Country	Food	Wood-working	Clothing	Printing	Engineering	Chemicals	Other manufacturing	Mining	Gas	Water	Electricity
Austria	o				o	o	o	o			o
Belgium	o					o ('47-'49)	o	o	o		o
Bulgaria	o	o	.		o	o	o	o			o
Czechoslovakia	o	o	o	o	o	o	o	o	o		o
Denmark	o	o	o	o	o	o	o	a	aq		aq
Finland	o	o	o	o	o	o	o	o	o	o	o
France	a	a	a	o	o	o	o	o	o		o
Saar .							o	o			
Germany											
western zones		o	o	o	o	o	o	o	o		o
West Berlin .	.	o	o	o	o	o			a		a
Soviet Zone .				.							
Greece. .	o	o	o		o	o	o	aq			o
Hungary .	o	o	o	o	o	o	o	o	o		o
Ireland	o	o	o	o	o	o	o	o	a	a	aq
Italy	o	o	o		o	o	o	o	o		o
Luxembourg	o	o	o	o	o	o	o	o	o	o	o
Netherlands	o		o		o	o ('47-'49)	o	o	o	o	o
Norway	o	o			o	o	o	o	o		aq
Poland	.			. .			.				.
Portugal	o				o	o	o	o			o
Rumania	.	.									.
Spain	o				o	o	o	o	o		o
Sweden	o	o	o	o	o	o	o	o	a ('47-'48)		aq
Turkey	o					o	o	o			o
United Kingdom	o	o	o	o	o	o	o	o	o	o	o

Note. — The following signs are used
o = covered in original index
a = added to original index in annual figures
aq = added to original index in quarterly as well as in annual figures
. = information is lacking as to whether the industry is or is not included
Blanks indicate that an industry is not included
Whenever a year is shown, it indicates that the original indices refer to that year only.

The following notes describe the sources and major adjustments made to the index numbers for each country ·

Austria . Monatsberichte des Österreichischen Institutes für Wirtschaftsforschung.
The original base (1937) of the index has been maintained. The index number for 1947 has been obtained by comparing the level of industrial production in 1948 and in 1947 by three separate calculations : (a) a direct computation based on individual branches of production combined according to the weighting system used in constructing the current indices , (b) the index formerly published in *Monatsberichte* ; and (c) the index computed by the U S. Commissioner in Austria. The figure shown for 1947 is an average of the three methods of calculation, the results of which are closely similar

Belgium · Bulletin de l'Institut de recherches économiques et sociales, Université catholique de Louvain.
Original base 1936-1938.

Bulgaria : (1) *Bulletin mensuel de la Direction générale de la statistique;* (2) *Bulgarian Bulletin,* London Office of the Bulgarian Telegraph Agency.

The index numbers for 1947 and 1948 (original base 1939) have been derived from (1). The 1949 and 1950 index numbers have been estimated on the basis of the statements on plan fulfilment given in (2).

Czechoslovakia : (1) *Statistický Zpravodaj ;* (2) *Hospodář,* (3) *Czech Economic Bulletin*

The index for the year 1948 has been taken from (3). The index for 1947 has been obtained by linking the old index published in (1) to the 1948 index. The annual index numbers for 1949 and 1950 have been derived from the statements on plan fulfilment shown in (2). The quarterly index numbers for 1949 given in (2), which have been assumed to be based on the corresponding quarter of 1948 = 100, were shifted to average 1948 = 100 by means of the old quarterly index numbers for 1948 compared with the old 1948 average published in (1). For 1950, the quarterly indices have been obtained from plan fulfilment statements given in (2) for the first half-year and for the third quarter. The index for the fourth quarter has been calculated as a residual.

Denmark : Statistiske Efterretninger

Original base 1935. The annual index numbers for manufacturing in 1947, 1948 and 1949 are the final (comparable) indices shown in *Industriel Produktionsstatistik.* Electricity and gas production have been added to the index calculated by the Danish Statistical Bureau. Relative weights (1938) : manufacturing 90.6, gas 2 9, electricity 6.5. The resulting index, shifted to a 1947 base, has been combined with an index of lignite production. Relative weights . lignite 3, manufacturing and public utilities 107. The index numbers thus obtained were then shifted to 1938 = 100. The quarterly indices shown have been derived by combining the original index numbers, recalculated on a 1947 base, for manufacturing (100.0), electricity (5.5) and gas (1.6). The resulting indices were then shifted to the base 1948 = 100

Finland (1) *Tilastokatsauksia ,* (2) *Economic Review,* Kansallis Osake Pankki, Helsinki.

The annual index numbers and the quarterly indices for 1950 have been taken from (1). Those for 1949 have been calculated by linking the indices for 1949 and 1950, shown by the revised indices of (2), to the quarterly data for 1950 given in (1).

France · Bulletin de la Statistique générale de la France

The annual index numbers include the clothing, wood-working and food industries.

Saar An index has been calculated by the Research and Planning Division on the basis of production data in physical terms published in *Saarländische Bevölkerungs- und Wirtschaftszahlen* covering coal, coke, pig-iron, steel and rolled steel. The weights used to combine the series are based on the relative net value per ton, as known for France in 1938.

Germany .

Western zones (1) *Wirtschaft und Statistik ;* (2) *Bulletin statistique,* Commandement en chef français en Allemagne.

Original base 1936 The old index numbers for 1947 and 1948 for the U K./U.S. Zone and for the French Zone, combined by means of the net values shown in *Economic Data on Potsdam Germany,* Office of Military Government for Germany (U S.), have been linked to the index for the western zones for 1949 and 1950 given in (1).

West Berlin (1) *Wochenbericht des deutschen Institutes fur Wirtschaftsforschung ,* (2) *Jahresbericht des Magistrats,* Berlin 1949

The index shown in (1) excludes public utilities and the food industry. The level of the index has been adjusted so as to include these activities on the basis of data shown in an article in the same publication (No. 45, 1950). The original base (1936) has been shifted to 1938.

Soviet Zone Die Wirtschaft, Berlin.

The 1950 index has been derived from the plan fulfilment report for that year.

Greece Monthly Indicators of Industrial Production in Greece, Federation of Greek Industries, Athens.

Original base 1939. The index numbers for ore mining, lignite and manufacturing have been combined. Relative weights 49.2 and 949.

Hungary (1) *Statisztikai Szemle,* January-June 1948 ; (2) *Statisztikai Szemle,* January-February 1950, p. 75 ; (3) *Statisztikai Tájékoztató* ; (4) *Jelentés a Haroméves terv első évéről.*

The annual index for 1947 has been taken from (1). The index for 1949 has been derived from (3) 1950, No. 1, p. 4. The indices for heavy and light industries were combined on the basis of weights given in (4) pp. 174 *et seq.* The index for 1950 was based on (3) 1951, No. 1, where the annual increase over 1949 is given. For 1948, the index was obtained by applying the annual increase from 1948 to 1949 shown in (2) to the 1949 index. All index numbers for Hungary reflect development of gross production at August 1946 prices for 1938-1949 and at 1949 prices for 1949-1950.

Ireland : Irish Trade Journal and Statistical Bulletin.
Original base 1936. The index numbers for 1947 and 1948 are obtained by combining the final index numbers of manufacturing with those of electricity and gas production. The index numbers by quarters were arrived at by combining the currently published index of production of transportable goods and the production of electricity. Relative weights 1948 : 94.3 and 5.7, respectively.

Italy : Notiziario Istat, Serie B, Istituto Centrale di Statistica.
The new index numbers compiled by the Italian Central Statistical Institute have been changed in order to take account of the adjustment in the index for engineering made by the Research and Planning Division, explained below, p. 206.

Luxembourg . Bulletin du Service d'Etudes et de Documentation économiques et de l'Office de la Statistique générale.
" Corrected monthly index numbers " have been taken. The original indices have now been shifted from the base 1937/38 = 100 to the base 1938 = 100. A note to the same effect in the *Economic Bulletin for Europe*, Vol 2, No. 1, p. 61, was erroneous : the figure given in that and the following *Bulletins* was in fact on the base 1937/38 = 100.

Netherlands Statistisch Bulletin van het Centraal Bureau voor de Statistiek.
The index of output per working-day has been used.

Norway Statistiske Meldinger.
Electricity production has been added to the index calculated by the Norwegian Statistical Central Bureau. Relative weights (1938) · manufacturing 89.4, electricity 10.6. The annual index numbers for manufacturing in 1947, 1948 and 1949 are the final indices shown in *Norges Industri.* The quarterly index numbers for 1949 have been adjusted to the level shown by the final annual indices.

Poland . (1) *Wiadomości Statystyczne ,* (2) *Statistical Tables of the Polish Institute for Economic Research.*
The current index published in (1) and based on 1937 has been shifted to 1938 by means of the old index published in (2).

Portugal : The index has been calculated by the Research and Planning Division on the basis of production data in physical terms for 40 commodities published in *Boletim Mensal do Instituto Nacional de Estatistica* covering mining, food, leather, cork, chemicals, building materials, textiles, paper and electricity. The weights used to combine the series are based on employment statistics given in the 1940 census and on data concerning employment, hours worked and fuel consumption for 1948. The coverage of the quarterly index is somewhat smaller than that of the annual index.

Rumania (1) *Vnechnaia Torgovlia,* No 2, 1951 ; (2) *For a Lasting Peace,* 1 January 1948 (weekly newspaper published by the Information Office of the Communist and Workers' Party) ; (3) *La Roumanie Nouvelle.*
The index for 1950 has been taken from (1). The indices for other years have been estimated on the basis of the development of production from year to year, quoted in the reports on plan fulfilment published in (3) Only the 1947 index has been estimated on the basis of (2).

Spain An index has been calculated by the Research and Planning Division on the basis of production data in physical terms for 42 commodities as published in *Boletín de Estadística,* Instituto Nacional de Estadística, Madrid. The activities covered are mining, metallurgy, engineering, chemicals, building materials, textiles, paper, leather, gas and electricity, and, for the annual index, food processing. The weights used to combine these series are based on employment in 1940, which has also been taken as the base year for the index.

Sweden Kommerstella Meddelanden.
Gas and electricity production has been added to the final index numbers for 1947 and 1948, electricity production only to the indices for 1949 and 1950 Relative weights : manufacturing 1000, utilities 71 The new monthly index numbers, beginning January 1949, are no longer seasonally adjusted.

Turkey . Recovery Guides, Economic Co-operation Administration
Index numbers for 1947 to 1949 have been taken from the source given. The 1950 index has been estimated on the basis of production data in physical terms for coal, cement, paper, yarn, sugar, tobacco, spirits, wine and exports of chromium.

United Kingdom · Monthly Digest of Statistics.
Original base 1946. Building has been excluded from the index. The index has been shifted to 1938 by use of the pre-war link (after the exclusion of building) given in the *Board of Trade Journal,* 11 September 1948.

United States : Survey of Current Business.
Original base 1935-1939. The unadjusted index number has been taken.

3 Sources of Index Numbers for Particular Industries (Tables 19, 21, I, II and III)

With the exception of building, the sources are in most cases the same as for the general indices. Where different sources have been used, these are indicated in the following notes, which also give the coverage and relative weights for those indices which are combinations of two or more series.

Engineering (Table 19)

The indices relate, as far as possible, to mechanical and electrical engineering, transport equipment (including ships and aircraft) and metal goods.

Austria Vehicles, machines and electro-technical equipment. Relative weights (1937) 18, 51 and 31. The index for 1947 has been estimated on the basis of various data on the production of engineering products, as published in *Monatsberichte*.

Belgium : The data have been supplied by the Belgian Ministry of Economic Affairs.

Czechoslovakia · The index numbers for 1950 are those published in *Hospodàr* linked to the old index previously shown in *Statistický Zpravodaj*. The new index distinguishes four sectors—heavy machinery, vehicles, precision machinery and the light metal industry. The indices for these four sectors have been averaged.

Denmark . Metals and transport equipment. Relative weights (1948) 70 and 30, from information on net values of output in 1948 in *Industriel Produktionsstatistik* 1948.

Finland The annual index numbers and the monthly indices for 1950 have been taken from *Tilastokatsauksia* The quarterly indices for 1949 have been deduced from the 1950 indices on the basis of a comparison of quarterly indices for the whole metal and metal processing industry in 1949 and 1950 shown in *Economic Review*, Kansallis Osake Pankki.

Germany ·

Western zones The old index numbers for 1947 and 1948 for the U K /U.S. Zone and for the French Zone have been linked to the new index for the western zones for 1949 and 1950 given in *Wirtschaft und Statistik*, in the same way as the general production index. Coverage and weights : French Zone : machines 4, vehicles 1, electrical industries 1, metal-works 3 ; U.K./U.S. Zone : machinery and optical goods 30, vehicles 12, electrical equipment 12, other metal goods 37. New index for western zones : machines 35, vehicles 14, electrical industries 13, iron, steel and metal goods 26, iron and steel construction (except railway wagons) 7, and shipbuilding 5.

West Berlin The original indices shown in *Wochenbericht* have been combined on the basis of weights shown in *Berliner Statistik*, eastern edition, 1947, p. 80 (electro-technical industry 59, machinery 30, metal goods 11). The index numbers for the first half of 1949 which are not given in *Wochenbericht* have been estimated from data on the gross value of production shown in *Berliner Statistik*, western edition. The original base year (1936) has been shifted to 1938.

Greece · The index numbers shown include steel-making.

Hungary · The index for 1949 has been derived from *Statisztikai Tájékoztató*, 1950, No. 1, p. 4. The indices for the iron and steel industry and machinery have been combined on the basis of weights shown in *Jelentés a Haroméves terv elso évéról* (1 August 1947 - 31 July 1948), p. 174. The 1948 index has been derived from the 1949 figure on the basis of the percentage increase given in the Plan Fulfilment Report for 1949. The 1947 figure is an average of the plan years 1946/47 and 1947/48, and is therefore approximate. All index numbers for Hungary relate to gross production at August 1946 prices for 1938-1949, and at 1949 prices for 1949/50.

Ireland Engineering and implements, and assembly, construction and repair of vehicles. Relative weights (1938) 40 and 60.

Italy The official index for engineering recently published by the Italian Central Statistical Institute does not include armaments production, which accounted for 29 per cent of total engineering output in 1938, but has been negligible or nil since the war The index has been adjusted to take account of armaments production in the base year.

Netherlands Metal industry. Index numbers adjusted for the number of working-days have been supplied by the Netherlands Central Bureau for Statistics.

Norway The level of the monthly index numbers for 1949 and 1950 has been adjusted on the basis of the new final index for 1949 shown in *Norges Industri*.

Poland *Statystyka Przemyslowa*, 1937 ; *Gospodarka Planowa*
The value of production in 1948 expressed in 1937 prices of the engineering and electro-technical industries taken in the second source has been related to the 1937 value of output according to the first source quoted. Figures for other years were estimated on the basis of data in physical terms.

Sweden · The index numbers for 1947 and 1948 have been communicated by the Kommerskollegium. The current indices are based on man-hours worked and have been linked to these Kommerskollegium indices.

Switzerland: Use has been made of the values of production for 1947 to 1950, estimated by Mr. F. Kneschaurek under the direction of Professor W A. Jöhr at the University of St Gallen. These value figures have been deflated on the basis of export unit values. The link with 1938 has been derived from man-hours worked reduced by 5.5 per cent in order to take account of changes in productivity. This percentage decrease has been estimated from *Fabrimetal*, bulletin hebdomadaire d'information et de liaison, Bruxelles, No. 64, 1947.

United Kingdom · Engineering, shipbuilding and electrical goods ; vehicles , and metal goods not included elsewhere. Relative weights (1946) : 59, 30 and 11.

Building (Table 21)

The indices relate to total building activity including the construction, and in most cases the repair, of dwellings and other buildings, public works, etc. In view of the different coverage of the indices for the various countries, no attempt has been made to compute a European average.

Belgium *Agence économique et financière.* The index covers total building activity.

Denmark *Danmarks Nationalbudget, 1950.* The basic data for 1950 were taken from *Statistiske Efterretninger*, 1950.

Finland *Economic Survey of Finland*, August 1950. The index has been derived from national income data in current prices. The index for 1950 is based on information supplied directly. The contribution of building activity to national income, as given in the source mentioned, is largely based on the consumption of raw materials.

France *Bulletin de la Statistique générale de la France* The index numbers shown are those published together with the general index of industrial production. They are largely based on man-hours worked.

Germany :

U K /U.S. Zone . *Wirtschaft und Statistik* The original base 1936 = 100 has been shifted to 1938 on the basis of employment data. The index is based on man-hours worked adjusted for changes in productivity.

Greece The index has been calculated from the value of construction of dwellings in 1949 prices as communicated by the Greek Ministry of Housing and Reconstruction.

Ireland · The index numbers have been communicated by the Irish Central Statistics Office They include all building and construction.

Italy . The indices are a combination of an index of the number of rooms built and man-days worked in public works The relative weights (1938) are 60 and 40. Basic data for 1948 have been communicated by the Italian Central Statistical Institute. The 1949 index was taken from corresponding information in *Bolletino Mensile di Statistica*, February and October 1950, and *Compendio di Statistica*, 1949/50, pp. 138 and 141. The index for 1950 has been estimated from similar, though incomplete, information contained in *Bolletino Mensile di Statistica*

Netherlands The index numbers have been communicated by the Central Bureau of Statistics

Norway · *Nasjonal Budsjettet*, 1950 and 1951 (St. Meld. No. 1)

Sweden : The index is based on the value of construction in constant prices as published in *Konjunkturlaget Hosten 1949*, Konjunkturinstitutet, Stockholm Corresponding data for 1950 and revisions for previous years have been communicated by the Konjunkturinstitutet.

United Kingdom *Monthly Digest of Statistics.* The index is the official index included in the general index of industrial production shown in the publication mentioned.

Textiles (Table I)

The index numbers shown are those described as covering " textiles " in the sources. Clothing is not included, except in cases where this industry cannot be separated from the index.

Austria The index for 1947 has been estimated on the basis of the old index numbers published in *Monatsberichte.*

Czechoslovakia : The index numbers for 1950 are those published in *Hospodář*, linked to the old index previously shown in *Statistický Zpravodaj.*

Denmark : The index for 1950 has been linked to the final index for 1949.

Finland : The annual index numbers and the quarterly indices for 1950 have been taken from *Tilastokatsauksia.* The quarterly indices for 1949 have been estimated from the 1950 indices, by taking into account the development of production as shown by *Economic Review,* Kansallis Osake Pankki (revised index, see notes on general production index).

Germany :

Western zones · The old index numbers for 1947 and 1948 for the U.K./U.S. Zone and for the French Zone have been linked to the new index for the western zones for 1949 and 1950 given in *Wirtschaft und Statistik* in the same way as the general production index.

Hungary · The index for 1949 has been taken from *Statisztikai Tájékoztató,* 1950, No 1, p 4. The 1948 index has been derived from the 1949 figure on the basis of the percentage increase given in the Plan Fulfilment Report for 1949. The 1947 figure is an average of the plan years 1946/47 and 1947/48, and is therefore approximate. All the index numbers for Hungary reflect gross production valued at 1946 prices for 1938-1949, and at 1949 prices for 1949-1950.

Ireland . Linen, cotton, jute and canvas , woollen and worsted ; and hosiery. Relative weights (1938) . 30, 29 and 41

Italy : The new index computed by the Italian Central Statistical Institute has been taken.

Netherlands · Index numbers adjusted for the number of working days have been supplied by the Netherlands Central Bureau of Statistics.

Poland · Index numbers for 1947, 1948 and 1949 have been computed on the basis of production data shown in *Wiadomości Statystyczne.* The commodities included are cotton yarn, cotton tissues, wool yarn, wool tissues, rayon tissues. The index for 1950 has been estimated from the Plan Fulfilment Report by assuming an average increase of 12 per cent.

Spain *Boletin de Estadistica.* The index numbers shown result from the combination of the following statistical series : wool combing, wool yarn, cotton yarn, rayon filament and staple fibre.

Sweden · The index numbers for 1947 and 1948 have been communicated by the Kommerskollegium They do not include ready-made clothing. The officially published indices for 1949 and 1950, which include ready-made clothing, have been linked to these figures.

Chemicals (Table II)

The index numbers shown are those described as covering " chemicals " in the sources. However, the definition of the industries varies between countries. As far as possible, the production of vegetable oils and soap has been included in cases where the official index does not cover these activities.

Austria The 1947 index has been taken from direct information received from the U.S. High Commissioner.

Belgium : The publication of the index ceased at the end of 1949. The 1950 index has therefore been estimated on the basis of the production of primary nitrogen, ammonium sulphate, mixed fertilizers (crude weight), crude tar, matches and alcohol.

Czechoslovakia · The index numbers for 1950 are those published in *Hospodàr,* linked to the old index previously shown in *Statistický Zpravodaj.*

Denmark : The index for 1950 has been linked to the final index for 1949.

Finland : The annual index numbers and the quarterly indices for 1950 have been taken from *Tilastokatsauksia.* The quarterly indices for 1949 have been deduced from the 1950 indices by taking into account the development of production shown in *Economic Review,* Kansallis Osake Pankki (revised index, see notes on general production index).

France : Production of soap and vegetable oils has been added to the annual index numbers.

Germany :

Western zones The old index numbers for 1947 and 1948 for the U.K./U.S Zone and for the French Zone have been linked to the new index for the western zones for 1949 and 1950 given in *Wirtschaft und Statistik,* in the same way as the general production index.

Hungary . The index for 1949 has been taken from *Statisztikai Tájékoztató,* 1950, No. 1, p. 4. The 1948 index has been derived from the 1949 figure on the basis of the percentage increase given in the Plan Fulfilment Report for 1949. The 1947 figure is an average of the plan years 1946/47 and 1947/48, and is therefore approximate. All the index numbers for Hungary reflect gross production valued at 1946 prices for 1938-1949, and at 1949 prices for 1949-1950.

Ireland : Soap and candles ; chemicals, drugs, oils, paint and polish ; fertilizers. Relative weights (1938) : 21, 61 and 18.

Italy : The new index computed by the Italian Central Statistical Institute has been taken.

Netherlands The index numbers for 1947, 1948 and 1949, which are adjusted for the number of working-days, have been communicated by the Netherlands Central Bureau of Statistics No index has been published for 1950 An estimate, however, has been made on the basis of the value of sales of the chemical industry (published in *Maandschrift*) deflated by means of the index of wholesale prices of finished chemical products The index thus obtained has been slightly adjusted on the basis of the movements of employment in the chemical industry

Norway : The level of the monthly index numbers for 1949 and 1950 has been adjusted on the basis of the new final index for 1949 shown in *Norges Industri* Production of industrial oils has been added to the annual indices

Poland For 1947 and 1948 an index has been computed on the basis of the production data published in *Wiadomości Statystyczne* 1950, No. 1, and *Gospodarka Planowa* 1949, p 263 The following products have been included soap, nitrogenous fertilizers, dyestuffs, matches, calcium carbide, super-phosphates, sulphuric acid and caustic soda. The index for 1949 has been derived from the percentage increases for individual commodities shown in the Plan Fulfilment Report.

Sweden · The index numbers for 1947 and 1948 have been communicated by the Kommerskollegium These index numbers do not include wood distillation The index for 1949 (which includes wood distillation) is the officially published index linked to 1948.

Switzerland . La Vie économique.
The index numbers have been arrived at by averaging an index of the volume of exports and the index of man-hours worked.

Building Materials (Table III)

The indices include production of bricks, tiles, cement, glass, ceramics and other non-metallic mineral products

Belgium Quarrying has been excluded

Czechoslovakia The index numbers for 1950 are those published in *Hospodàr*, linked to the old index previously shown in *Statistický Zpravodaj*. Building materials and ceramics and glass are combined. Relative weights (1938) building materials and ceramics 6, glass 2

Finland The annual and quarterly indices for 1950 have been taken from *Tilastokatsauksia*. The quarterly indices for 1949 have been estimated from the 1950 indices and from the comparison of indices for 1949 and 1950 shown in *Economic Review*, Kansallis Osake Pankki (revised index, see notes on general production index).

France Glass and building materials (including ceramics) have been combined. Relative weights (1938) . building materials 72, glass 28.

Germany
western zones For 1949 and 1950 the index numbers given in *Wirtschaft und Statistik* for stone and earthenware, ceramics, hollow glass and sheet glass have been combined For 1947 and 1948, this combined index has been extrapolated backwards by an index of a similar coverage obtained from U K /U.S and French zonal data.

Hungary The index for 1949 is a combination of the published index numbers for glass and building materials with weights from *Jelentés a Haromeves terv elso évérol* (1 August 1947-31 July 1948), p 174 The 1948 index has been derived from the 1949 figure on the basis of the percentage increase given in the Plan Fulfilment Report for 1949 The 1947 figure is an average of the plan years 1946/47 and 1947/48, and is therefore approximate All the index numbers for Hungary reflect gross production valued at August 1946 prices for 1938-1949, and 1949 prices for 1949-1950

Italy The new index computed by the Italian Central Statistical Institute has been taken.

Netherlands . Index numbers adjusted for the number of working-days have been supplied by the Netherlands Central Bureau of Statistics.

Norway Final annual indices.

Poland . Index numbers for 1947 and 1948 have been calculated on the basis of production data shown in *Wiadomości Statystyczne*, 20 March 1949. The following products have been included · lime (excluding fertilizing lime), cement, bricks, china (table and other), porcelain (excluding technical), technical porcelain and sheet glass. The indices for 1949 and 1950 have been arrived at on the basis of the percentage increases for individual commodities shown in the Plan Fulfilment Report. However, production of bricks and china in 1950 had to be estimated from data for the first three quarters.

Spain · *La Renta Nacional de España*, 1949, p. 54. The index for building materials shown in the publication has been shifted to the base 1935 = 100. The index for 1950 has been estimated on the basis of cement production.

Sweden : Final annual index numbers calculated by the Kommerskollegium.

United Kingdom : China and earthenware, glass, bricks, cement, etc. The index used as a link to pre-war covers building as well as building materials.

Yugoslavia · The indices have been computed on the basis of production data published in the *Statistical Yearbook of the United Nations* 1949-1950, the Statistical Report of Yugoslavia to the United Nations, and *Laka Industrija*. The commodities included are cement, bricks and tiles, glass. The 1950 figure has been derived from the Plan Fulfilment Report.

4. Combined " European " Index Numbers

The annual European index numbers for general industrial production and for particular industries shown in Tables 9, 19, I, II, III have been obtained by combining the indices for individual countries (1938 = 100) with weights proportional, in principle, to the contribution of industry as a whole or of the particular industry concerned, to national income, or net output in 1938, measured in dollars of 1938 purchasing power.

Estimates of the contribution of industry to national income in national currency, defined as the sum of incomes produced by industry and measured as the gross value of output minus purchases of materials, etc , and depreciation, have been drawn up according to a standard industrial classification for ten countries for which national income estimates classified by industrial origin are available. For three other countries, estimates of net output of industry have been used. A full list of sources used for these data and estimates will be found in the *Economic Survey of Europe in 1948*, pp. 237-240

In order to translate the data thus obtained into comparable units, the figures expressed in national currency were converted into dollars of 1938 purchasing power The required exchange rates were calculated by assuming that in 1929 the dollar exchange rates of European countries generally expressed correctly the purchasing power of national currencies over industrial goods. Exceptions were made for the United Kingdom, where over-valuation of the pound sterling was put at about 15 per cent, and the Scandinavian countries and Finland, whose currencies were assumed to be in equilibrium with the pound and not the dollar. Allowance for movements in the prices of manufactures in European countries and in the United States between 1929 and 1938 then led to the purchasing power parity rates used

The data on the contribution of industry to national income thus obtained were used to calculate output per person employed in 1938, and the result of this calculation formed the basis for estimates of the probable level of output per person employed in those countries for which no national income data are available In drawing up these estimates, account was taken of the similarity in industrial structure and other relevant conditions as between the countries for which the contribution of industry to national income could be obtained and those where it was to be estimated.

The weights used in combining the index numbers of general industrial production for individual countries into a European total are proportional to the contribution of industry to the national income arrived at according to the methods explained in the preceding paragraphs.

In the case of the engineering weights, the relative importance of engineering as compared with general industrial production was obtained from the weighting systems adopted by the individual countries in calculating their national index numbers and the percentages thus obtained were applied to the net value of general industrial production measured in dollars at 1938 purchasing power.

In the case of textiles and building materials, the definitions of these industries vary considerably in the industrial censuses of the different countries For this reason, another method was applied in order to arrive at a set of weights reflecting the relative net output in the various countries For each country, the production of cotton, wool and rayon yarns and tissues was expressed in terms of the value added per ton of each of these commodities in pounds sterling at 1935 prices, as obtained from the United Kingdom Census of Production The British figures of value added per ton agree closely with similar data available for France (1938) and for Germany (1936). The weights used for the textile industry are proportional to the value thus obtained for each country. The weights for building materials were estimated by evaluating the 1938 output (1937 for Austria and Czechoslovakia) of bricks and cement in each country at 1938 U.S. wholesale prices.

For the purpose of combining index numbers of chemical production, an estimate of the dollar value of the 1938 net output of that industry was made (1) by determining, on the basis of industrial censuses, the proportion of the contribution of all industries which it accounted for, and (2) applying that proportion to the total contribution of all industry in each country, expressed in dollars, calculated according to the foregoing description.

The weights for general industrial production and for particular industries in 1938 are shown in the following table .

Table B

WEIGHTS USED TO COMBINE NATIONAL INDEX NUMBERS OF INDUSTRIAL PRODUCTION

Country	All industries	Engineering	Textiles	Chemicals	Building materials
Austria	1.5	1.1	1.2	1.7	2.0
Belgium	2.9	2 7	3.7	3.7	7 2
Bulgaria	0.2	—	—	—	—
Czechoslovakia	3.2	2 5	4 3	4 4	3.7
Denmark	1.2	1 3	0 4	1 2	1 5
Finland	0.5	0.3	0.5	1 2	1 0
France	11 6	15.0	16.5	11 8	7.7
Germany : western zones	20 0	27 2	18 6	31 9	25 6
West Berlin	2 1	5 1	—	—	—
Soviet Zone	7 9	—	—	—	—
Greece	0.6	0 2	1.4	1.5	0.7
Hungary	1.0	0.5	1 1	1 4	0 4
Ireland	0.4	0 1	0 3	0 5	0 2
Italy	6 6	5.3	12 0	7 5	7 1
Luxembourg	0 2	—	—	—	—
Netherlands	2 5	2 5	2 8	1 5	2 3
Norway	0 8	0.7	0.4	1 3	1.7
Poland	2 6	2 1	3 7	4 0	3 5
Portugal	0 4	—	—	—	-
Rumania	0 8	—	—	—	—
Saar	0.4	—	—	-	—
Spain	2 8	—	—	—	3 0
Sweden	2 8	3.9	2 3	4 4	2 0
Switzerland	—	1 9	—	1.9	—
Turkey	0 5	—	—	—	-
United Kingdom	24.6	26.7	29.3	17 9	23 7
Yugoslavia	—	—	—	—	1.7
Poland (recovered territories)	1 9	0.9	1.5	2 2	5 0
Total	100 0	100.0	100.0	100.0	100 0

The quarterly index numbers shown in the tables are based on 1948 = 100, and the weights used in combining them into European totals are 1938 weights carried forward to 1948 by use of the annual indices for the year 1948 (1938 = 100). These weights therefore reflect 1948 output measured in 1938 prices and do not take into account changes in the structure of relative costs and prices between 1938 and 1948. The percentage share of each country in the European total in 1950 has similarly been calculated by applying the 1950 annual production index to the 1938 weight. These data, therefore, also fail to reflect changes in the international structure of costs and prices between pre-war and post-war.

The index numbers for Poland given in the tables relate post-war output in the post-war territory to pre-war output in the pre-war territory. In order to eliminate the error which this definition would introduce into the figures for Europe as a whole, the indices for Poland, taken into account in computing the European averages, have been multiplied by the ratio between the outputs in the post-war and pre-war territory of Poland.

Although the countries included in the European averages do not cover the whole of Europe (excluding the Soviet Union) these averages would be affected only moderately by the inclusion of the countries omitted. The number of countries covered by the index numbers for individual industries is somewhat smaller than for general industrial production. In the absence of index numbers, some countries, for instance the Soviet Zone of Germany, had to be left out of consideration.

Since only annual index numbers of production are available for certain countries, the quarterly European indices (1948 = 100) cover fewer countries than the annual indices (1938 = 100) shown in the same table. For this reason, the annual European totals are not always equal to the average of the corresponding quarterly data.

5 World Industrial Production (Charts 1A and 1B)

Both charts are based on the index numbers of industrial production published in the *Monthly Bulletin of Statistics*, United Nations. The index numbers for each group of countries are shown in Chart 1B The original figures have been shifted to the base 1948 = 100. Chart 1A, on the other hand, was obtained by multiplying each of these index numbers by the revised weights used in the calculation of the world index of mining and manufacturing production, published in the *Monthly Bulletin of Statistics*, April 1951. All weights have been shifted to 1948 by use of the index numbers themselves. The index number for the rest of the world is obtained as a residual calculated by deducting the indices of the countries specified in the chart from the index of world industrial production including the Soviet Union.

III. EMPLOYMENT (TABLES 11 AND 26)

1 General

The index numbers of employment in industry shown in Table 11 cover manufacturing, mining, gas, water and power supply, but exclude building As far as possible, these index numbers relate to all employees including both wage earners and salaried personnel, irrespective of the size of the establishment in which they are employed. However, the data available do not always reflect variations in employment in industry as a whole, as will be seen from the following table :

Table C

COVERAGE OF EMPLOYMENT INDEX NUMBERS (1948)

Thousands

Country	Total employment (wage and salary earners)	Employment covered by the annual index	Employment covered by the quarterly index
Austria	723	294 WS	294 WS
Belgium	1,192	1,192 WS	564 W
Czechoslovakia	more than 1,800	1,400 WS	1,400 WS
Denmark	425 *b*	266 WS	..
Finland	310 *b*	about 300 WS	95 W
France	4,700	about 3,000 WS	about 3,000 W
Germany western zones	5,600	5,600 WS	
West Berlin	300	300 WS	176 WS
Soviet Zone of Germany	2,450	2,450	
Hungary	.	411 WS	
Ireland	200 *b*	127 WS	130 *a*
Italy	3,300 *b*	2,830 WS	1,767 W
Netherlands	997 *b*	997 WS	770 WS
Norway	300 *b*	232 WS	290 WS
Poland (1949)	1,800 *b*	1,483 WS	1,050/1,500 W/WS
Sweden	850 *b*	796 WS	500 W
Switzerland	650 *b*	531 W	340 W
United Kingdom (1949)	more than 9,000	9,500 *a*	9,500 *a*

Note — *a* Including managers and proprietors
b Approximate figures
W = Wage earners
S = salaried workers

Since the employment indices are, among other purposes, to serve that of calculating the level of output per man in industry (Table 26), adjustments have been made where necessary in order to take account of variations in actual employment which are not reflected in the underlying statistical series. Thus the indices for the United Kingdom in 1947 and for Finland in 1949 and 1950 have been adjusted to allow for the effects of the coal crisis and of strikes, respectively. Similarly, the index for Sweden has been corrected to allow for the increase in total employment due to new establishments not yet covered by current statistics.

In many cases the lack of statistical data has made it necessary to use employment data relating only to establishments exceeding a given minimum size, to a sample of establishments, or to wage earners only. In certain cases, the available series have been prolonged by means of less representative data. For this reason, the quarterly index numbers in particular are frequently less reliable than the annual data. These technical details are mentioned in the notes and sources relating to particular countries given below.

2 Sources and Notes

Austria : (1) *Monatsberichte des Österreichischen Institutes für Wirtschaftsforschung ,*
(2) *Statistische Nachrichten*

Source (1) gives employment indices in large establishments for 1937 and post-war years based on 1934 = 100 The comparison of 1934 with post-war years has not been derived from the movements of the index, but from figures of complete censuses of wage and salary earners in March 1948 and in 1934 published in (2)

Belgium : Bulletin de statistique.

Monthly indices of employment have been computed on the basis of the number of wage earners employed in coal mines, quarrying, iron and steel, metal working, non-ferrous metals, tobacco, nitrogenous products, lime and clay, paper, bricks, water supply, wood-working, hosiery, weaving and ceramics ; the index for 1947 (1937 = 100) from direct information Annual indices for 1948 and 1949 have been estimated from social security returns Quarterly indices for 1949 have been calculated from monthly indices adjusted by half-yearly social security figures ; quarterly indices for 1950 from monthly data.

Czechoslovakia (1) *Statistický Zpravodaj ,*
(2) *Hospodář*

Special index of employment published jointly with the index of industrial production. This index covers employers as well. For 1950, however, the index of employment has been deduced from the index of productivity and the index of industrial production

Denmark (1) *Industriel Produktionsstatistik* (Statistiske Meddelelser), 1938, 1939, 1947, 1948 and 1949 ;
(2) *Statistiske Efterretninger*

The link for employment between 1947 and 1938 has been calculated in the following way an index of employment of wage earners in industrial establishments having more than five workers comparing 1938 with 1939 has been linked with an index of employment of wage and salary earners in the same category of establishments comparing 1939 with 1947. The data have been taken from (1) Indices for 1948 and 1949 relate to employment of wage and salary earners from the same source The figures have been adjusted to take account of the numbers employed in lignite mining in the post-war period, but, as these workers are employed only for a quarter of the year, four workers have been counted as one full-time worker. The quarterly index is based on figures of wage earners in various months according to (1), as regards 1949, and on the index of employment published in (2) as regards 1950

Finland : (1) *Tilastokatsauksia ,*
(2) *Teollisuustilastoa ;*
(3) *Sosiaalinen Aikakauskirja.*

The index for 1947 has been taken from figures of wage and salary earners in (1) and (2). The indices for 1948, 1949 and 1950 have been derived from direct information and are adjusted to take account of strikes Quarterly indices have been derived from a chain index based on figures of wage earners shown in (3)

France (1) *Revue française du Travail ,*
(2) *Bulletin de la Statistique générale de la France.*

Employment figures relating to wage and salary earners in " Energie " and " Industries de transformation, bâtiment exclu " given in (1) have been combined.

Germany :

Western zones . Arbeits- und Sozialstatistische Mitteilungen.

The index for 1947 from the issue of 25 November 1950 relates to wage and salary earners. Indices for 1948, 1949 and 1950 from numbers of wage and salary earners in total industry at the end of each quarter. The index for the first quarter 1950 has been adjusted to take account of low employment in February according to industrial statistics not expressed in the quarterly figures.

West Berlin · (1) *Berlin in Zahlen 1945 ;*
(2) *Statistisches Handbuch für Deutschland 1928-44 ;*
(3) *Statistical annex to the monthly report of the U.S. Military Governor Nr. 21 ;*
(4) *Berliner Statistik ;*
(5) *The Economy of Western Berlin*, Berlin 1950.

The index for 1947 compares the numbers of wage and salary earners in March-September 1947 according to (3) with May 1939 according to (1), with an adjustment to 1938 on the basis of data for the whole of pre-war Germany given in (2). Numbers in 1947 have been distributed by zones (U.K./U S.-French and Soviet) according to the 1946 census of population, reported in (4). The index for 1949 has been obtained by comparing the 1947 figure for the western sectors with similar data for 1949 in (5). Quarterly indices and the index for 1948 are based on industrial statistics relating to firms having more than 5 workers.

Soviet Zone (1) *Statistical annex to the monthly report of the U S Military Governor Nr. 21 ;*
(2) *Statistisches Handbuch für Deutschland 1928-1944 ;*
(3) *Europa Archiv*, 20 March 1950.

The index for 1947 compares numbers of wage and salary earners, distributed by branches of industry, in March-September 1947 from (1) with numbers of wage and salary earners in 1938 from (2) (data for the Soviet Zone have been estimated by means of the available distribution of manpower in the whole of pre-war Germany in May 1939). The index for 1949 has been assumed to be the same as in 1947 because no change in manpower appears to have taken place according to the number of workers distributed by occupations in 1947 (as shown in (1)) and in 1949 (as communicated by the Haut Commissaire français en Allemagne). The 1948 index is a rough estimate based on the figures in (3).

Hungary . (1) *Jelentés a Haroméves terv elsö évéröl ;*
(2) *Gasdasagstatis ;*
(3) *Statisztikai Tájékoztató.*

Numbers of wage earners in mining, smelting and manufacturing industries in 1938 (monthly average) and for each month in 1947 are shown in (1). The numbers of salaried workers in mines have been estimated from data on State coalmines in (2), those in smelting from similar data for heavy industry , those in manufacturing industry from the report on industry shown in (2), June 1948, p. 448. The pre-war numbers of salaried workers have been taken from the *Statistical Yearbook* for Hungary, 1938 edition. The index for 1947 thus obtained has been linked with the index of wage earners in factories (1947 = 100) shown in (3), 1951, No. 1, p. 8.

Ireland · *Irish Trade Journal and Statistical Bulletin.*

Indices for 1947 and 1948 from results of the census of production.
Index for 1949-1950 from numbers employed in each quarter.

Italy · (1) *Annuario di statistiche del lavoro*, Confederazione Generale dell'Industria Italiana, Roma ;
(2) *Rilevazioni statistiche sulla occupazione e la disoccupazione in Italia*, Ministero del Lavoro.

The annual indices for 1947 and 1948 have been calculated from numbers of wage and salary earners in (1). Other indices based on numbers of wage earners in a sample covering, in general, enterprises having more than 10 workers according to (2).

Netherlands · *Statistisch Bulletin.*

The annual indices of employment for 1947, 1948 and 1949 have been taken from the source quoted. The index for 1950 as well as the quarterly data were obtained by direct information.

Norway : (1) *Norges Industri 1947, 1948, 1949 ;*
(2) *Arbeidsmarkedet.*

Numbers of wage and salary earners in 1938-1949 in industrial enterprises covered by the annual census of production from (1) The quarterly index has been computed from figures in (2) on the base 1949 = 100 and shifted to a 1948 base by means of data given in (1).

Poland · (1) *Wiadomości Statystyczne ;*
(2) *Poland of Today*, Polish Research and Information Service, New York.

The quarterly index of employment is based on the index of employment (1947 = 100) shown in (1). Figures for 1949 and 1950 from direct information. The link with the pre-war year has been taken from (2), June 1950. It is not clear whether the latter figures compare the numbers of wage and salary earners (as in (1)) in 1938 and 1949 or the numbers of wage earners only.

Sweden : Industri, 1938, 1946, 1947, 1948.

The annual index numbers for 1947 and 1948 comparing numbers of wage and salary earners, excluding owners and proprietors, were taken from the source quoted above Account has been taken of a difference in coverage in 1946 The quarterly indices are based on indices comparing employment of wage earners in successive months, and are adjusted for new establishments on the basis of *Oversikt over det ekonomiska laget 1951*, p 38

Switzerland La Vie économique

The annual indices of employment were obtained from the number of workers, presumably only wage earners, in factories, registered in October of each year The quarterly indices have been derived from the chain index numbers shown in the same source, relating to wage earners only As the employment in the third quarter 1949 was the lowest in the year, the annual index has been increased by one point

United Kingdom · Monthly Digest of Statistics.

The source gives the distribution of total manpower in Great Britain, divided into mining and quarrying, gas, water and electricity supply and manufacturing industries Figures for February 1947 are not available An average was computed for the eleven other months, and the annual average was estimated at 2 per cent below that figure The figure shown for the first quarter of 1947 is the average of January and March reduced by 8 per cent (see for these estimates *London and Cambridge Economic Service*, 1947, p 40) The original figures had to be adjusted in view of the revisions made in July of each year Index for 1947 (1938 - 100) supplied directly by the Ministry of Labour, relates to eleven months (February excluded) and was adjusted so as to correspond to the corrected annual average of number of persons employed The 1949 figures have been adjusted in view of an increase in coverage

3. Weighting

The combined index numbers of industrial employment are obtained by weighting together the indices for different countries by means of co-efficients calculated as follows · first, data on total employment were obtained for the year in the period 1947-1950 for which such data were most complete These data were then carried back to the year 1938, and, where necessary, forward to 1948, by means of the index numbers themselves The resulting European index numbers are subject to reservations because of the lack of comparability among index numbers relating to the individual countries, and because of uncertainty as to the degree to which handicrafts and small-scale industries are included It appears indeed that in certain cases these sectors are not covered by employment statistics

As the index for Poland compares post-war employment in the present territory with pre-war employment in the pre-war territory, the index zero has been given the new territories, but their weight is included in the total of weights for calculating the European index

Table D

WEIGHTS USED IN COMBINING NATIONAL INDEX NUMBERS OF INDUSTRIAL EMPLOYMENT

(*per cent*)

Austria	1.6	Germany :		Norway	0 9
Belgium	3 1	Western zones	17.6	Poland	
Czechoslovakia	5 0	West Berlin	1 6	pre-war territory	3 8
Denmark	0 9	Soviet Zone	7 8	recovered territory	2 5
Finland	0.6	Hungary	1 3	Sweden	2 2
France	14.1	Ireland .	0 6	Switzerland	1 9
		Italy	8 5	United Kingdom	23 8
		Netherlands	0 9		

4 Output per Man in Industry (Table 26)

The index numbers of output per man have, in general, been obtained by dividing the indices of employment shown in Table 11 into the indices of industrial production shown in Table 9. To the extent that the employment indices are adequately adjusted for changes in hours worked per man which are not reflected in the employment data used, the ratios thus calculated therefore express the level of productivity per year and per wage and salary earner.

For certain countries, however, the available production index numbers are only approximate. Moreover, alternative index numbers, which show a production level considerably different from the index numbers used in Table 9, exist in a number of cases. For these reasons, index numbers of productivity are shown in Table 26 whenever such indices are published as such. This obtains in particular for the Soviet Zone of Germany and Poland (as regards the change from 1949 to 1950). The same also applies to Czechoslovakia, where in fact the index of employment given in Table 11 has been derived from the index of industrial production and the index of productivity. Finally, the index of output per man for Hungary in 1949 has been taken from *Statistikai Tajekoztato*, 1951, Nr. 1.

IV. PRODUCTION AND CONSUMPTION OF MAJOR COMMODITIES (TABLES 12, 16, 18, 22, 27-29, 32, 33, 47, IV-XVI, XX, XXIV and XXV)

1. General

The figures on production and consumption of major commodities have been derived chiefly from official sources, as indicated in the footnotes to the tables and in the notes below In most instances, however, the original figures have been supplemented by estimates, as explained in the following paragraphs.

Pre-war production in post-war territories. The official German production statistics permit a break-down of total German production of major commodities in 1936 by zones (four occupation zones, Berlin, the Saar and territories ceded to Poland). It was assumed that the distribution of production between the zones in 1938 was equal to that in 1936. Estimates were thus made of the production in 1938 for the zones of occupation in Germany, the Saar and the ceded territory The latter were added to Poland's output in the pre-war territory. No estimate has been made with regard to territory ceded by Poland to the Soviet Union.

In a few cases where total German production was very different in 1936 and 1938, or where its regional distribution was very dissimilar in 1936 and later years for which a break-down by zones is possible, no attempt has been made to estimate a 1938 break-down by occupation zones and the figures shown, therefore, refer to 1936.

A distribution of German consumption by zones for pre-war is, for many commodities, not possible with any reasonable degree of accuracy Therefore, when tables show consumption as well as production of a certain commodity, the pre-war figures for Germany and Poland refer to pre-war territories.

Net imports or exports. No direct consumption statistics or data on stocks being available for a number of commodities, and a number of countries, consumption was generally calculated from the production figures by adding net imports or subtracting net exports. The trade figures used in these calculations were derived from official trade statistics The net imports or exports of countries for which no official trade returns are available have been derived from the trade returns of their trade partners For the calculation of European total net imports or exports (excluding the Soviet Union), the trade between eastern European countries and the Soviet Union had in many cases to be estimated.

Annual figures for 1950 were in some instances estimated from data covering less than the full year. Moreover, it is not always certain that the data of imports and exports comprise exactly the same commodities as the production figures. The consumption data thus obtained by the combination of figures taken from different sources are therefore subject to wider margins of error than the production data.

European totals. For most commodities, pre-war production figures for virtually all European countries are available In many instances, however, no statistics are available on post-war production. In many cases, where no post-war data exist, it was possible to make estimates of the production of individual countries on the basis of published index numbers, information available for part of the year or general knowledge of trends. In such cases the estimates are not shown in the tables, but they have been used in calculating the European totals. In some instances, no reasonable estimate for the production of certain countries could be made. Where the relative importance of these countries as producers of the commodities concerned is small, it has been assumed that their production moves parallel with that of countries for which production data are available In cases where no data are available for a large part of the European production, or where production is measured in heterogeneous units, no attempt has been made to arrive at European totals

2. Sources and Notes

Production of Crude and Finished Steel and Consumption of Finished Steel (Tables 28 and XI)

Crude Steel

The figures refer to total production of steel ingots and direct castings, including special alloyed steel, whether for further use by the producer, or for sale. The data included for direct castings refer either to the weight of steel poured for the manufacture of castings, or to the actual weight of the castings trimmed and machined. Wrought (puddled) iron is excluded.

The figures have been taken from the *Quarterly Bulletin of Steel Statistics for Europe*, Steel Section, Economic Commission for Europe, the *Monthly Bulletin of Statistics*, United Nations, and from the following national sources .

Austria · *Monatsberichte des Österreichischen Institutes fur Wirtschaftsforschung.*

Czechoslovakia The 1950 figure is based on the percentage increase of the metallurgical industry over 1949, as given in the Plan Fulfilment Report

France *Bulletin de la Chambre syndicale de la Sidérurgie française.*

Saar . *Bulletin mensuel de statistique industrielle.*

Germany *Wochenbericht*, Deutsches Institut fur Wirtschaftsforschung

Italy · *Bollettino Mensile di Statistica*

Spain *Boletin de Estadistica.* The statistics do not include production of castings, which, however, is believed to be small.

Sweden *Kommersiella Meddelanden.*

United States The figures exclude steel for castings used by foundries operated by companies not producing steel ingots.

Finished Steel

The data relate to hot-rolled products The production figures were taken from the *Quarterly Bulletin of Steel Statistics for Europe*, Steel Section, Economic Commission for Europe, and for the U S A from *Annual Statistical Report*, American Iron and Steel Institute The 1950 figure for the United States is estimated on the basis of crude steel production.

The consumption of finished steel refers to apparent consumption, *i e* production of finished steel plus net imports of finished steel, with no allowance for changes in stocks. The trade figures have been taken from national foreign trade statistics

Production of Iron Ore, Pig-iron and Ferro-alloys and Consumption of Scrap (Table X)

Iron Ore

The data relate to the metal content of iron ores produced, including manganiferous iron ores, but excluding pyrites The percentages of metal content assumed are as follows

Austria	— 30	Germany ·		Italy	— 45
Belgium	— 35	Western zones	30 (pre-war)	Poland	34
Luxembourg	— 30		27 (post-war)	Spain	— 48
Czechoslovakia	— 34	Soviet Zone	— 30	Sweden	— 61
France	— 33	Hungary	— 39	Turkey	— 60
				United Kingdom	— 30

These percentages have been revised from those assumed in last year's SURVEY on the basis of more recent information received by the Steel Section, Economic Commission for Europe

The figures have been taken from the *Quarterly Bulletin of Steel Statistics for Europe*, Steel Section, Economic Commission for Europe, and, for the United States, from the *Monthly Bulletin of Statistics*, United Nations

The figures for the United States relate to the production of all usable iron ores, whose iron content averages over 50 per cent. " Usable iron ores " exclude manganiferous iron ores containing 5 per cent or more of manganese

The figures for Poland include a small amount of iron pyrites

Pig-iron

The data relate to total production of pig-iron and blast-furnace ferro-alloys, both for steel making and other purposes.

The figures have been taken from the *Quarterly Bulletin of Steel Statistics for Europe*, Steel Section, Economic Commission for Europe, and the following national publications :

Austria . *Statistische Nachrichten.*

Belgium *Bulletin de statistique.*

Hungary *Statisztikai Szemle*, January 1951. According to this source, iron and steel production increased by 17 8 per cent from 1949 to 1950

France and Saar *Bulletin de la Chambre syndicale de la Sidérurgie française*

Germany :

Western zones · *Wirtschaft und Statistik*

Soviet Zone *Statistische Praxis*, February 1951 According to this source, pig-iron production increased by 35 per cent from 1949 to 1950

Netherlands *Maandschrift van het Centraal Bureau voor de Statistiek.*

Poland *Polish Facts and Figures*, 27 January 1951 According to this source, production increased by 9 per cent from 1949 to 1950.

Scrap

The data relate to the consumption of scrap in blast-furnaces, steel works and iron foundries, except for the following countries :

Belgium and France :	blast-furnaces, steel works and wrought-iron mills ;
Saar and Czechoslovakia :	blast-furnaces and steelworks ;
Spain :	steelworks ;
United Kingdom and Poland .	blast-furnaces, steelworks, iron foundries and wrought-iron mills.

The figures have been taken from the *Quarterly Bulletin of Steel Statistics for Europe*, Steel Section, Economic Commission for Europe, and, for the United States, from *Survey of Current Business.*

Production and Consumption of Hard Coal and Lignite (Tables 27 and IV)

The production figures relate to net pithead production of clean coal raised to the surface. The consumption data take account of stock changes whenever these are available as indicated in the footnote to Table 27. They exclude bunkers for foreign ships.

The coefficients used for converting lignite into its hard coal equivalent are the following :

Country	*Equivalent quantities of lignite per ton of coal*
Austria .	2 0 tons
Czechoslovakia	1.7 „
Germany	4 5 „
Italy . Picea	1 5 „
Xiloide	3 0 „
Other countries	3.0 „

The figures have been taken from the *Monthly Bulletin of Statistics*, United Nations, the *Monthly Bulletin of Coal Statistics*, Coal Division, Economic Commission for Europe, national trade statistics and the following other national publications :

Austria *Monatsberichte des Österreichischen Institutes fur Wirtschaftsforschung.*

France and Saar · *Bulletin mensuel de statistique; Bulletin mensuel de statistique industrielle.*

Germany

Western zones . Zahlen zur Kohlenwirtschaft, Deutsche Kohlenbergbau-Leitung, Essen. The figures for hard coal include the production of pitch coal.

Italy *Bollettino Mensile di Statistica .* The pre-war figure includes the production in Venezia Giulia

Netherlands *Maandschrift van het Centraal Bureau voor de Statistiek.*

Spain *Boletin de Estadistica.*

United Kingdom · *Monthly Digest of Statistics.* The production data include open-cast coal. The consumption data are those published in this publication, to which shipments to Northern Ireland and bunkers for British ships have been added.

Production of Electric Power (Tables V and VI)

The figures for total electric power production and those for hydro- and thermo-electricity have been supplied by the Power Section of the Power and Steel Division, Economic Commission for Europe. They have, in most cases, been communicated to the Power Section by the authorities of the countries concerned. The data occasionally differ from statistics given in national publications, mostly because the coverage of the figures in national sources is less comprehensive. For countries from which no official replies to questionnaires have been received, the data have been taken from national sources.

The figures shown in the tables relate to total electricity production, *i.e* production of public utilities and by private industry for its own use The main exception is the United Kingdom, for which public utility production only is given The European totals, however, include estimates for total production in the United Kingdom (including Northern Ireland). These estimates are based on data communicated by the British authorities

Production of Crude Petroleum and Consumption of Crude Petroleum and Products (Table VIII)

The production data have been taken from *Petroleum Press Service*, Petroleum Press Bureau, London, and the following national publications :

France. *Bulletin mensuel de statistique.*

Germany : Western zones : Wirtschaft und Statistik; Statistisches Handbuch von Deutschland, 1928-1944.

The data on consumption of crude petroleum and products have been arrived at by adding net imports of crude petroleum and of refined products (the latter expressed in terms of crude oil by using the conversion factor 1 ton refined = 1.11 tons crude) to production of crude petroleum. No allowance was made for changes in stocks, except in the cases mentioned below. Where possible, bunkers for foreign ships have been considered as exports and are therefore not included in consumption.

For the following countries a different method for estimating the consumption has been used :

France : Bulletin mensuel de statistique industrielle

This publication gives the refinery throughput of crude oil. To this throughput net imports of refined products have been added. For post-war years, stock changes of refined products given in the same source have been taken into account.

Italy Bollettino del Comitato Carboni

The same method has been used as for other countries, but, for post-war years, stock changes of crude petroleum have been taken into account. These stock changes were estimated on the basis of the difference between the throughput of refinery works and the arrivals of crude petroleum, which are both shown in the publication mentioned.

United Kingdom Ministry of Fuel and Power Statistical Digest, 1948 and 1949.

Same method as for France. No account has been taken, however, of changes in stocks of refined products. The 1950 figure has been estimated on the basis of data given in the *Petroleum Times*, London, 9 March 1951, p. 180

United States : Survey of Current Business.

The figures for domestic demand for refined products shown in this publication have been converted into their crude-oil equivalent. The conversion factors were obtained by comparing the refinery throughput to refinery output, given in the same publication.

Total Energy Consumption (Table IX)

Energy consumption was estimated by converting the different primary energy sources—coal, lignite, hydro-electricity, mineral oils and, in the case of France and Italy, natural gas—into coal by means of the following coefficients, which are based on calorific values :

Type of fuel	*Equivalent quantities of fuel per ton of coal*
a. Brown coal and lignite	See note to Table 27 above
b. Crude petroleum and petroleum products	2/3 ton
c Hydro-electricity	1,590 kWh
d Natural gas	752 cub m.

The consumption of hydro-electricity has been taken as equal to production. No account has been taken of fuelwood, which is of importance in a few countries only.

Production of Basic Chemicals (Table XII)

Sulphuric Acid

The figures refer to production expressed in terms of pure (monohydrate) sulphuric acid (100% H_2SO_4) and include the sulphuric acid equivalent of oleum or " fuming " acid.

The figures have been taken from the *Statistical Yearbook 1949-50*, United Nations, and the following national publications

Austria Report of the United States High Commissioner, Statistical Annex.

Belgium : Bulletin de l'Institut de recherches économiques et sociales, Université catholique de Louvain, May 1950.

France : Bulletin mensuel de statistique.

Germany :

Western zones. *Economic Data on Potsdam Germany*, Office of Military Government for Germany (U S), September 1947 ; *Wirtschaft und Statistik* ; *Wochenbericht*, Deutsches Institut fur Wirtschaftsforschung.

Soviet Zone : Economic Data on Potsdam Germany, September 1947. Industry and Materials Division, Economic Commission for Europe (Document ECE/IM/41) for 1948 and 1949. The 1950 figure has been obtained from the plan fulfilment report.

Italy : Bollettino Mensile di Statistica.

Netherlands The figures for post-war years shown in the *Statistical Yearbook 1949-50*, United Nations, have been adjusted to the level of the 1938 figure, shown in a footnote in the same publication. The figure for 1950 has been obtained by applying the production index, shown in the *Maandschrift van het Centraal Bureau voor de Statistiek*, to the 1949 production

Poland *Statistical Yearbook of Poland, 1948* *Rocznik Statystyczny 1949 ; Wiadomości Statystyczne* ; The Plan Fulfilment Report, 1950.

Portugal. Anuário Estatistico : Estatistica Industrial.

Rumania *Evolutia Economiei Romanesti*, April 1948 (supplement to *Probleme Economice*) , *Bursa*, 28 April 1948, Bucharest. The figures for 1949 and 1950 have been obtained from plan fulfilment reports.

Sweden · Industri.

United Kingdom · Monthly Digest of Statistics.

United States · Survey of Current Business.

Calcium Carbide

The figures are those indicated in national publications as production of calcium carbide. The definition may differ slightly from country to country.

The data have been taken from the following publications :

Austria *Statistische Nachrichten.*

France *Bulletin mensuel de statistique industrielle.*

Germany

Western zones. Industrielle Produktion nach Zonen, Wirtschaft und Statistik, Statistische Berichte.

Soviet Zone *Industrielle Produktion nach Zonen, Economic Data of Potsdam Germany*, September 1947 ; *Réalités Allemandes*, No. 4, April 1949 ; *L'Industrie Chimique et Phosphates Réunis*, Paris, June 1950.

Italy *La Chimica e l'Industria*, XXXV, June 1950, Milan. The 1950 figure has partly been estimated.

Norway *Norges Industri ; Produksjonsstatistikk ; Statistisk-Økonomisk Oversikt over Aret 1948.*

Poland. Wiadomości Statystyczne.

United States · Survey of Current Business.

Caustic Soda

The figures refer to the total production of caustic soda (sodium hydroxide, NaOH).

The data have been taken from the *Statistical Yearbook 1949-50*, United Nations, and the following national publications:

Austria *Monatsberichte des Österreichischen Institutes fur Wirtschaftsforschung.*

France · Bulletin mensuel de statistique industrielle.

Germany

Western zones *Industrielle Produktion nach Zonen ; Statistische Berichte.*

Soviet Zone *Industrielle Produktion nach Zonen, Die Wirtschaft*, 27 July 1950.

Italy *Bollettino Mensile di Statistica.*

Poland · Wiadomości Statystyczne. The 1950 figure has been taken from the plan fulfilment report.

Spain · Boletín de Estadistica.

Sweden *Industri*

United States *Survey of Current Business.*

Soda Ash

The figures refer to the total production of soda ash (sodium carbonate, Na_2CO_3), excluding, as far as possible, natural sodium carbonate and sodium bicarbonate ($NaHCO_3$).

The figures have been taken from the *Statistical Yearbook 1949-50*, United Nations, and the following national publications :

Austria *Report of the United States High Commissioner ; Foreign Commerce Weekly* (U.S. Department of Commerce), July 1950. The figure for 1950 is partly estimated.

France : Bulletin mensuel de statistique industrielle.

Germany :

Western zones · *Wirtschaft und Statistik ; Statistische Berichte*

Soviet Zone *Economic Data on Potsdam Germany*, Office of Military Government for Germany (U S), September 1947 ; *Statistische Praxis*, October 1950. The 1950 figure has been obtained from the plan fulfilment statement

Italy : *La Chimica e l'Industria*, XXXII, Milan, June 1950, *L'Industrie chimique et Phosphates Réunis*, Paris, September 1950 ; *Notiziario Istat.* The figures for 1950 have been obtained by applying the production index, given in the last source listed, to the 1949 production.

Portugal . Anuário Estatistico , Estatistica Industrial.

Spain · *Boletin de Estadistica.*

United States . Survey of Current Business.

Production and Consumption of Sulphur in Western Europe (Table 32) and United States Sulphur Supplies (Table 33)

Western Europe · *Production*. The figures for the production of natural sulphur relate to Italy, Spain and France, those for pyrites cover Finland, France, Italy, Germany, Greece, Norway, Portugal, Spain, Sweden, the United Kingdom and Yugoslavia The data for the years 1936-1938, 1948 and 1949 have been taken from *Statistical Yearbook 1949-50*, United Nations, except for the production of pyrites in Finland during 1949, which has been estimated The German pre-war figure used relates to production in the pre-war territory.

No figure for the production of natural sulphur is available for France in 1950 , production in France in 1949 represented under 5 per cent of the western European total, and the total for 1950 assumes that this proportion was maintained

Data for production in 1950 were taken from the following sources :

Italy . Bollettino Mensile di Statistica, March 1951.

Spain Boletin de Estadistica, March 1951.

Norway Statistiske Meldinger, No 2, 1951.

The production of pyrites in 1950 for other countries has been estimated

Trade The figures for net imports of sulphur and pyrites take account of the trade of all the main trading countries. All figures have been extracted from the national trade accounts, except for Yugoslavia whose exports for 1948 were taken from the *Survey of the Economy of the Federal Republic of Yugoslavia* Yugoslav exports in 1949 and 1950 were taken as equal to exports in 1948 The pre-war exports of Spain relate to 1935. An adjustment has been made to eliminate the trade of eastern Germany from the pre-war German trade returns.

The sulphur content of net exports has been based on conversion factors shown in the *Statistical Yearbook, 1949-50*, United Nations For imports, average sulphur content of western European, Algerian and Cypriot production during 1945/49 has been used.

United States *Production* of natural sulphur and pyrites from *Statistical Yearbook, 1949-50*, United Nations. The 1950 figure for sulphur production is from the *Survey of Current Business* ; for pyrites the 1950 figure is estimated. *Trade* in natural sulphur and pyrites was obtained from U S trade statistics. Stock movements for the pre-war period have been taken from the *Minerals Yearbook*, U.S Department of Interior, and for post-war years, from the *Survey of Current Business*

Production of Fertilizers (Table XIII)

Superphosphates

The figures refer to superphosphates obtained by mixing rock phosphate with acid All figures are expressed in P_2O_5 content.

The figures have been taken from the *Statistical Yearbook 1949-50*, United Nations, *Commodity Reports, Fertilizers*, 10 August 1950, Food and Agriculture Organization of the United Nations, and the national sources listed below. In some instances the figures have been estimated on the basis of production data for agricultural years.

France · *Bulletin mensuel de statistique.*

Germany :

Western zones *Industrial Production Statistics.*

Italy : Bollettino Mensile del Comitato Carboni.

Netherlands . Jaarcijfers voor Nederland; Maandschrift van het Centraal Bureau voor de Statistiek The 1938 production has been taken from the first source. The post-war years have been obtained by applying production indices, given in the second source, to the 1938 production.

Norway : *Statistisk Arbok; Norges Industri.*

Poland : *Concise Statistical Yearbook of Poland, 1938; Wiadomości Statystyczne.*

Spain : *Boletin de Estadistica.*

Sweden . *Kommersiella Meddelanden.*

United Kingdom : *Monthly Digest of Statistics.*

United States : *Survey of Current Business.*

Potash

The data refer to the K_2O equivalent of various potash salts mined.

The figures have been obtained from the following publications :

Belgium : *Bulletin de statistique.*

France : *Bulletin mensuel de statistique industrielle.*

Germany :

Western zones : *Statistische Berichte ; Industrial Production Statistics.*

Poland *Statistical Yearbook, 1948,* United Nations.

United States : *Minerals Yearbook 1949,* Bureau of Mines.

Nitrogen

The figures refer to the estimated N content of nitrogenous fertilizers only and do not include nitrogen used for industrial purposes. They cover the production (N content) of ammonia solutions, ammonium sulphate, ammonium nitrate, ammonium phosphate, calcium nitrate, calcium cyanamide, nitrate of soda, nitrate of potash, nitrate of soda-potash, nitro-chalk, urea and anhydrous ammonia.

The figures have been taken from *Statistical Yearbook 1949-50,* United Nations, *Commodity Reports, Fertilizers,* 10 August 1950, Food and Agriculture Organization of the United Nations, and the national sources listed below. In some instances the data have been estimated on the basis of production figures for agricultural years.

Belgium : *Bulletin de statistique.*

Czechoslovakia : *Statistický Zpravodaj.*

France : *Bulletin mensuel de statistique industrielle.*

Germany :

Western zones : *Die wirtschaftliche Lage in der Bundesrepublik Deutschland; Industrial Production Statistics.*

Netherlands : *Maandschrift van het Centraal Bureau voor de Statistiek.* The production indices given in this publication have been applied to the 1938 production.

Norway : *Statistiske Meldinger.*

Poland : *Wiadomości Statystyczne.*

United Kingdom : *Monthly Digest of Statistics.*

Production of Cotton Yarn, Wool Yarn, Rayon Filament Yarn and Staple Fibre (Table 18)

Cotton Yarn

The figures refer to the total weight of pure cotton yarn spun, whether for sale, for further processing, or on commission. Unless otherwise stated, mixed yarn, cotton yarn made from cotton waste and tyre-cord yarn are not included, as far as is known.

The figures have been taken from the *Monthly Bulletin of Statistics,* United Nations, and the following national statistics :

Austria : *Monatsberichte des Österreichischen Institutes fur Wirtschaftsforschung.* The figures include waste.

Belgium : *Bulletin de Statistique.* Cotton yarn with an admixture of artificial fibre is included.

Czechoslovakia : The figures include vicuna yarn and tyre-cord yarn.

France : *Bulletin mensuel de statistique industrielle* The figures include yarn spun from cotton waste, shoddy, staple fibres, and tyre-cord yarn.

Germany : *Statistical Handbook of Germany,* 1946, Office of Military Government for Germany (U.S.) The figures include mixed yarns.

Hungary *Statisztikai Szemle.* The 1950 figure has been derived from the Plan Fulfilment Report.

Italy : *Notiziario della Confederazione Generale dell'Industria Italiana.* The figures include mixed yarn, predominantly of cotton.

Netherlands : *Maandschrift van het Centraal Bureau voor de Statistiek.* The figures include mixed yarn, predominantly of cotton, and cotton spun from waste.

Spain : *Boletín de Estadística.*

Sweden : The figures include mixed yarns.

Turkey : *Konjonktur.*

United Kingdom : Total conditioned weight of single cotton yarn produced and yarn produced for industrial purposes, such as tyre-cord yarn.

United States *The Cotton Board Trade Letter*, Cotton Board, Manchester. The production data shown in this publication are estimates based on raw cotton consumption.

Wool Yarn

The figures refer to the total weight of pure wool yarn spun, whether for sale, for further processing or on commission. The total weight includes carded and combed (worsted) yarn for weaving, for knitting and other uses. Unless otherwise stated, mixed wool yarn and wool yarn made from wool waste are not included as far as is known.

The figures have been taken from the *Monthly Bulletin of Statistics*, United Nations, and the following national statistics

Austria : *Monatsberichte des Österreichischen Institutes fur Wirtschaftsforschung*, *Wool Intelligence*, Commonwealth Economic Committee, London. The figures include mixed yarns.

Belgium *Bulletin de statistique.*

Hungary The 1950 figure has been derived from the percentage increase over 1949 published in *Statisztikai Szemle.* The figures include mixed yarns

Italy *Bollettino del Comitato Carboni ; Mondo Economico*, Milan. The 1950 figure is an estimate based on production data for seven months. The 1938 figure which is taken from the second source listed may not be strictly comparable with post-war years The figures include mixed yarns.

Germany . *Statistical Handbook of Germany*, 1946, Office of Military Government for Germany (U.S).

Netherlands The figures include mixed yarns.

Portugal : *World Wool Digest*, International Wool Secretariat, London. The figures include mixed yarns.

Spain . *Boletín de Estadística.*

Sweden : *Statistisk Årsbok*, 1949. The figures include mixed yarns.

Turkey : *Konjonktur.* The 1950 figure is estimated on the basis of production data for eight months.

United Kingdom *Monthly Digest of Statistics*, *World Wool Digest*, International Wool Secretariat, London. The figures as published in the first source refer to deliveries of worsted yarn and estimated production of woollen yarn. The pre-war figures have been taken from the second source.

United States : Production of all known manufacturers engaged in spinning yarn on the woollen and worsted system. The data include mixtures.

Rayon Filament Yarn and Rayon Staple Fibre

The figures refer to the total weight of rayon filament yarn and rayon staple fibre Unless otherwise stated, waste, straw, artificial horsehair and other artificial manufactured fibres of a non-cellulose base (nylon, lanital, PE-CE, etc) and spun rayon yarn are excluded.

The figures have been taken from *Rayon Organon*, Textile Economics Bureau, New York, the *Monthly Bulletin of Statistics*, United Nations, and the following national publications :

Belgium . *Bulletin de statistique.*

France : *Bulletin mensuel de statistique industrielle.* Total production of filament yarn and of staple fibre including lanital waste.

Germany : The figures include filament yarn ; high tenacity viscose silk and other rayon, excluding waste ; staple fibre includes production of artificial jute. The production by zones in 1936 amounted to 51 3 thousand tons in the western zones, 29.6 thousand tons in the Soviet Zone, and 5 2 thousand tons for the rest of Germany *(Statistical Handbook of Germany*, 1946, Part III, B. 2).

Italy : *Bollettino Mensile di Statistica.*

Netherlands · *Maandschrift van het Centraal Bureau voor de Statistiek.*

Spain *Boletin de Estadistica.*

United Kingdom *Monthly Digest of Statistics.* The figures include total production of filament yarn (including nylon yarn) and staple fibre. No nylon was produced prior to 1941.

United States : The figures include production of tow (an intermediate product in the making of staple fibre).

Production and Consumption of Wood-pulp (Table XIV)

The figures relate to the dry weight of mechanical and chemical wood-pulp of all types. The consumption data refer to apparent consumption, *i e.* production, plus net imports with no allowance for changes in stocks—with the exceptions mentioned below.

The figures have been supplied by the Timber Division, Economic Commission for Europe. They have largely been taken from reports of national experts made in connexion with a timber consumption trend study undertaken by the Timber Division. Additional data have been obtained from the *Yearbook of Forest Products Statistics, 1950* Food and Agriculture Organization of the United Nations, *Timber Statistics*, Food and Agriculture Organization of United Nations and Economic Commission for Europe, and national foreign trade statistics.

Stock changes have been taken into account for the following countries and the following years

Austria ·	for 1948 and 1949	Netherlands :	for 1948
Belgium ·	for 1948	Norway	for 1948, 1949 and 1950
Denmark :	for 1949	Sweden .	for 1948, 1949 and 1950
Germany, Western zones .	for 1949	United Kingdom :	for 1948, 1949 and 1950.

The data on stock changes have been taken from the *Yearbook of Forest Products Statistics* and, for the United Kingdom, from the *Monthly Digest of Statistics.* In the case of Norway for all years and of Sweden for 1950, stock changes have roughly been estimated on the basis of production of paper and paper board

In those cases where no stock changes for 1950 have been taken into account, the consumption figures may be somewhat too low, since it is known that during that year stocks of wood-pulp decreased in most countries.

Production and Consumption of Sawn Softwood (Table 29)

The figures refer to the production and consumption of planks, boards, boxboards, etc Railway sleepers are not included. Although the coverage may vary slightly from country to country, the series relating to each particular country is consistent.

The production data relate to total sawmill production, *i e.* both from indigenous timber and from imported logs.

The figures have been supplied by the Timber Division, Economic Commission for Europe. They have largely been taken from reports of national experts made in connexion with a timber consumption trend study undertaken by the Timber Division Additional data have been obtained from the *Yearbook of Forest Products Statistics, 1950,* Food and Agriculture Organization of the United Nations, *Timber Statistics*, Food and Agriculture Organization of the United Nations and Economic Commission for Europe, and national foreign trade statistics.

Production of Cement (Table XV)

The data refer to the production of artificial cements only, *i e* Portland, bauxite, Roman cement, etc., except as noted. The figures have been taken from the *Monthly Bulletin of Statistics*, United Nations, and the following publications

Austria · *Monatsberichte des Österreichischen Institutes fur Wirtschaftsforschung.*

Belgium . The figures include total production.

Czechoslovakia . Portland cement only.

Denmark . Portland cement only.

France : *Bulletin mensuel de statistique industrielle.* The figures include artificial cements (portland, blast-furnace, clinker slag, special, building) with a pressure resistance of over 100 kilogrammes per square centimetre

Germany . *Statistical Handbook of Germany*, Part III, B 1, Office of Military Government for Germany (U S), 1946.

Italy : *Bollettino Mensile di Statistica.* The figures for post-war years represent about 90 per cent of total production.

Netherlands · *Maandschrift van het Centraal Bureau voor de Statistiek* The figures include Portland and blast-furnace slag cement

Norway · *Statistiske Meldinger* Portland cement only.

Poland Portland cement only.

Spain . *Boletin de Estadistica.* Portland cement only.

Turkey. *Konjonktur*. Details not available.

United Kingdom · *Monthly Digest of Statistics*. Portland cement only.

United States · Portland cement only.

Production of Building Bricks (Table XVI)

The figures relate to total production of clay bricks used for building purposes. They include both common and facing (ornamental) bricks (solid, hollow, shaped or perforated). Unless otherwise stated, refractory, paving, concrete, shale and sand-lime bricks are excluded.

The size of bricks in the various countries may differ, and therefore the figures are not always comparable as between countries The figures have been taken from the *Monthly Bulletin of Statistics*, United Nations, and the following publications :

Austria *Monatsberichte des Österreichischen Institutes fur Wirtschaftsforschung*

Belgium *Bulletin de statistique* The figures exclude the production of facing bricks.

Denmark *Statistisk Årbog* The 1950 figures are based on the index for the brick industry from *Statistiske Efterretninger*.

Finland *Tilastokatsauksia*.

France *Bulletin mensuel de statistique industrielle* Home manufacture is excluded. The original series is given in metric tons, and the data have been converted into numbers by using conversion rate of 400 bricks = 1 ton

Italy *Bollettino del Comitato Carboni*, Ministero dell'Industria e del Commercio The 1950 figure has been estimated on the basis of production data for the first seven months

Netherlands · *Maandschrift van het Centraal Bureau voor de Statistiek*. Ordinary bricks only, excluding sectional, hollow, ornamental, and sand lime bricks

Poland The figures relate to the production in all state plants and also in all co-operative and private establishments employing 20 or more workers

Sweden *Industriell Månadsstatistik*.

United Kingdom *Monthly Digest of Statistics*. The figures include common, facing and engineering bricks made from shale, sand lime, clay or concrete, but exclude firing bricks, glazed bricks and all types of refractory bricks.

Yugoslavia *Statistical Yearbook 1949-50*, United Nations.

Construction of Dwellings (Table 22)

The figures in the table have been taken from (a) *Monthly Bulletin of Statistics*, United Nations, and (b) *Statistical Yearbook, 1949-50*, United Nations

In addition, the following sources were used .

Austria Unpublished official estimates

Belgium Pre-war *Housing Policy in Europe*, I L O. 1930, p 18. 1948-49 *L'Economie belge 1949*, Ministère des Affaires économiques et des Classes moyennes, p 75 1950 Data supplied by the Ministère de la Santé publique et de la Famille The figures, which relate to buildings completed, were converted into dwelling units by raising the original figures by about 8 per cent

Czechoslovakia 1950 · Annual Report of the Central Planning Office. The original data (22,000 rooms) were converted into dwellings at the rate of 1 7 rooms = 1 dwelling

Denmark 1947-1949 *Economic Survey of Denmark for 1950*, p 27. 1950 · Unpublished official estimate The data given in the *Monthly Bulletin of Statistics* exclude dwellings built in rural areas

Finland. 1947-1949 · *Bank of Finland Bulletin*, May 1950 1950 Forecast in *Economic Survey of Finland*, August 1950, p. 15.

France Pre-war : *Etudes et Conjoncture* (Union Française), July 1947, p 48. 1947-1950 : Ministère de la Reconstruction et de l'Urbanisme.

Germany

Western zones · Pre-war Estimated by taking 60 per cent of the figure for total Germany given in the Yearbook 1949-50 *Wirtschaft und Statistik* The published data for the U K /U.S. Zone for 1949 were raised by 7 per cent to allow for the French Zone

Hungary 1950 : Speech by Z Vas, *Szabad Nép*, 7 January 1951.

Italy 1950 · Estimate completed by adding 100 per cent (the proportion in 1949) to allow for communes of under 20,000 inhabitants.

Norway Pre-war : Unpublished official estimates. Post-war : *Statistiske Meldinger.*

Poland 1950 . Annual Report of the Central Planning Board. The original data (81,600 rooms) were converted into dwelling units at the rate of 2.4 rooms = 1 dwelling

Rumania 1950 · Annual Report of the Central Planning Board The original data (370,000 m²) were converted into dwelling units by taking 1 dwelling = 45 sq metres.

Sweden : 1939, 1947-1949 : *Sociala Meddelanden* No. 8, 1950. 1950 . *Översikt over det Ekonomiska Läget 1951* (National-budget for År 1951), Meddelanden från Konjunkturinstitut, Serie B. 12, p. 129.

Switzerland · Unpublished official estimates Published data relate only to communes of more than 1,000 inhabitants.

United Kingdom . 1947-1950 . *Monthly Digest of Statistics*

Yugoslavia · 1947-1948 : Unpublished official estimates. 1949-50 : *Tehnika*, 8 October 1950, p 248. The original data were converted into dwelling units by taking 1 dwelling = 45 square metres

Production of Motor Vehicles (Table XX)

The figures relate to the total production of motor vehicles for the domestic and export markets. They include the production of foreign-owned companies operating within the territory of the reporting country. They exclude, however, production of completed vehicles built on imported chassis. The production of passenger cars includes taxis. The figures for commercial vehicles refer to the production of lorries (trucks) and buses, delivery vans and special vehicles, such as ambulances, fire apparatus, etc. Vehicles operating off the road, such as industrial and farm tractors, road and other construction machinery, etc are excluded.

Austria . (Commercial vehicles only) *Statistische Nachrichten ; Monthly Bulletin of Statistics*, United Nations

France . *Bulletin mensuel de statistique industrielle.*

Germany . *Western zones* : *Wirtschaft und Statistik , Monthly Bulletin of Statistics*, United Nations.

Italy *Notiziario della Confederazione Generale dell'Industria Italiana , Congiuntura Economica.* The figures for passenger cars previously published in the *Economic Bulletin for Europe* included some commercial vehicles. The figures have now been revised and are comparable to those for other countries.

United Kingdom *Monthly Digest of Statistics*

United States *Monthly Bulletin of Statistics*, United Nations Factory sales

Production of Tractors (Tables XXIV)

The figures relate to the production of agricultural tractors, including two- and three-wheel and track-laying tractors, but excluding garden tractors

The figures have been taken from the following sources .

Austria *Statistische Nachrichten.*

Czechoslovakia · *Statistický Zpravodaj*, supplemented by date communicated by the Czechoslovak Government to the Industry and Materials Division, Economic Commission for Europe. The 1950 figure has been estimated on the basis of plan data.

France *Bulletin mensuel de statistique industrielle , Deux ans d'exécution du plan de modernisation et d'équipement 1947-1948*, 4e Rapport semestriel, Paris 1949 , *L'Usine nouvelle*, Paris, 11 March 1951.

Germany

Western zones *Agricultural Machinery*, Political and Economic Planning, London, 1949 , *Wirtschaft und Statistik.*

Soviet Zone *Agricultural Machinery*, Political and Economic Planning, London, 1949. Figures for post-war year have been estimated on the basis of statements in *German Economic Press Review*, 3 November 1949 and 13 April 1950, and *Soviet Monitor*, Tass, London, 19 August 1950.

Hungary *Report of the First Year of the Three-year Plan*, Budapest ; *Szabad Nép*, 5 February 1950 and 23 January 1951.

Italy . Data communicated by the statistical authorities to the Industry and Materials Division, Economic Commission for Europe.

Poland *Survey on the Farm Machinery Situation in Europe*, Food and Agriculture Organization of the United Nations, 1951 ; *Gospodarka Planowa*, No. 2, 1951

Rumania *Informations Roumaines*, 14 February 1951, Paris , *La Roumanie Nouvelle*, 16-28 February 1951, Bucharest.

Sweden Data communicated by the Swedish Government to the Industry and Materials Division, Economic Commission for Europe. The 1950 figure has been estimated by that Division.

Switzerland Data communicated to the Industry and Materials Division, Economic Commission for Europe.

United Kingdom *Monthly Digest of Statistics.*

Production of Meat and Milk (Table 16)

Meat

The figures relate to the production of meat in terms of carcass weight, including offal. Goat and buffalo meat is included in those countries where its production is significant ; poultry is excluded. Slaughter of imported live animals is included Slaughter fats were excluded for those countries where reliable statistics are available. Bacon, however, is included.

The figures have been taken from *Commodity Reports, Meat and Livestock*, 29 December 1950, Food and Agriculture Organization of the United Nations.

Milk

The figures relate to total production of milk from cows , milk from buffaloes, ewes and goats is included in those countries where its production is significant

The figures have been taken from the *Statistical Yearbook 1949-50*, United Nations, the *Monthly Bulletin of Statistics*, United Nations, and the following national sources ·

Austria Data communicated by the Austrian authorities to the Agricultural Division, Economic Commission for Europe.

France *Revue d'Etudes économiques franco-allemandes*, Baden-Baden, January 1951.

Germany

Western zones *Revue d'Etudes économiques franco-allemandes*, Baden-Baden, January 1951.

Italy Data communicated by the Italian authorities to the Agricultural Division, Economic Commission for Europe.

Netherlands *Maandschrift van het Centraal Bureau voor de Statistiek.*

Poland The 1949 figures have been estimated on the basis of production in previous years and the increase in livestock numbers.

In some cases the 1950 figures had to be estimated on the basis of monthly production data. These monthly production figures, however, do not always cover total production of milk In those cases the assumption has been made that the increase of total milk production in 1950 over 1949 is proportional with the increase of that part of the production of milk which is covered by the monthly production data. This procedure was necessary for Denmark, the Netherlands, Sweden, Switzerland and the United Kingdom

Food Consumption per capita in the Western Zones of Germany and in the United Kingdom (Table 47)

Western Germany

The data for pre-war and 1948/49 were taken from *F.A.O. Food Balance Sheets*, those for 1950 from *Statistischer Monatsbericht des Bundesministeriums fur Ernahrung, Landwirtschaft und Forsten*, August 1950 and February 1951.

Pre-war consumption relates to the pre-war territory of the whole of Germany , 1948/49 consumption refers to the western zones of Germany excluding west Berlin, while 1950 consumption includes west Berlin.

The consumption of cereals in 1950 covers total disappearance (" Abgang ") for human consumption of wheat, rye, barley, oats and rice outside agriculture. Only negligible amounts of cereals are directly consumed on the farm, *i.e.* without being milled off the farm. Figures for other years have been adjusted to exclude certain minor grains The figure for cereal consumption has been increased by adding 17 per cent to the consumption of bread grains to allow for quantities delivered off the farm but not reported.

The meat data relate to consumption of meat other than poultry, rabbits and game and include offal. Allowance has been made for changes in stocks of meat. In order to estimate meat consumption within agriculture in 1950, the number of animals slaughtered on farms has been multiplied by the average slaughter weights, exclusive of slaughter fats, of commercially killed animals. In the case of sheep and calves, slaughter fats have not been deducted, but the quantities involved are of minor importance only The total consumption of meat within agriculture thus computed has been added to total disappearance outside agriculture.

Sugar consumption refers to total disappearance of sugar. The consumption of refined sugar in manufacturing was assumed to be the same proportion of the total in 1950 as in 1948/49, *i.e.* 1.2 per cent, according to the *F.A.O. Food Balance Sheets*. Allowance has been made for losses and changes in stocks.

The consumption of edible oils and fats has been adjusted for slaughter fats obtained from farm killings.

United Kingdom :

All figures have been taken from the *Monthly Digest of Statistics*, February 1951. The data have been adjusted by excluding the consumption of poultry, rabbits and game. Offal is included.

3. Industrial Production of the U S S.R. and Eastern Europe (Tables 12 and XXV)

Industrial Production in the U.S.S.R. (Table 12)

The data for 1937 have been taken mainly from *Draft of the Third Five-year Plan for the Development of the National Economy of the U.S.S.R. 1938-1942*, Moscow 1939 (in Russian) ; those for 1938 from *Socialist Construction in the U S.S.R. 1933-1938*, Moscow 1939 (in Russian). The planned figures for 1950 have been taken from the law on " The Five-year Plan for the Rehabilitation and Development of the National Economy of the U.S.S.R., 1946-1950", Moscow 1946 The actual output figures in 1950 are based on " The Report on the Fulfilment of the Five-year Plan 1946-1950 " (*Pravda*, 17 April 1951), which gives the 1950 index numbers in relation to 1940 The 1948 and 1949 output figures have been derived from the 1950 output on the basis of the annual percentage increases as indicated in the annual reports on plan fulfilment. The actual figures for 1940 have been drawn from the sources listed below Where data for other years have been obtained from sources other than those indicated above, these other sources are also given.

Coal and Lignite. *Soviet News*, 31 January 1947.

Crude Oil. *Kalendar Spravochnik* 1948, p. 99.

Electric Power *Kalendar Spravochnik* 1948, p. 94. The 1949 figure is based on a statement by G Malenkov, Deputy Chairman of the Council of Ministers of the U S S.R., which indicates that the 1949 production was 62 per cent more than that of 1940 (*Pravda*, 10 March 1950). The 1948 figure has been derived from the preceding one by applying the official annual increase

Pig Iron, Crude Steel and Rolled Steel E. Lokshin, *Industry in the U.S.S.R.*, Moscow 1948 (English edition, p 95)

Copper : The Economic Results of the U S.S.R. in 1940 and the Plan of National Economic Development for 1941, by N A. Voznessensky, states that in 1940 the output of copper increased by 65 per cent over that of 1937 The 1937 figure has been derived from the 1938 output of 103,200 tons on the basis of the annual increase indicated by *Industriya*, 8 February 1939

The 1948, 1949 and 1950 figures have been calculated on the basis of the annual percentage increases since 1945 The 1945 output is based on that of 1950 and the statement in the law on the Five-year Plan that the 1950 output would be 1.6 times that of 1945.

Equipment for Iron and Steel Mills *Pravda*, 24 April 1946.

Metal-working Machine-tools The 1940 production is based on the indication that the 1950 production—scheduled to be 74,000 units—represents 1½ times that of 1940, E. Lokshin (*Soviet Industry in the New Five-year Plan*, Moscow, 1946, p. 37 (in Russian) It was not possible to give the actual absolute figures for the post-war period because of the non-comparable definition of the available data.

Tractors : The 1949 and 1950 figures are given in the annual Reports on Plan Fulfilment (*Pravda*, 18 January 1950 and *Soviet News*, 29 January 1951) The Report on Five-year Plan Fulfilment stated that the 1950 output in 15 BHP units was 3.8 times that in 1940. The 1940 and 1950 figures are expressed in numbers units as no data are available for expressing them in 15 BHP units The 1940 figure is taken from E. Lokshin, *Soviet Industry in the New Five-year Plan*, p 40

Combined Harvesters The 1949 and 1950 production figures are given by the annual reports on plan fulfilment. The 1950 index number in relation to 1940 is taken from the Report on Five-year Plan Fulfilment. The 1940 figure has been derived from the 1950 production applying the preceding index number.

Electric Motors Index numbers for 1950 production of motors up to 100 kW are derived from a statement by G M. Malenkov which indicates that the production in 1949 was 2.5 times that in 1940 As regards motors of over 100 kW on a statement by N. A. Bulganin, Deputy Chairman of Ministers of the Soviet Union (*Bolchevik* No 21, 1950)

Mineral Fertilizers · Bulganin *(loc. cit.)* stated that the 1950 production of mineral fertilizers was nearly twice that of 1940. The 1940 figure is derived from data given in *Khimicheskaya Promyshlennost*, No. 4, 1947, p 1.

Cement E Lokshin, *Soviet Industry in the New Five-year Plan*, p 62 *Tsement*, No. 2, 1947, gives planned output in 1947 as being at the pre-war level (5 8 million tons), and exceeding the 1946 output by 71 per cent The 1947 actual output has been obtained by applying the published annual percentage increase to the 1946 output thus computed. The 1948, 1949 and 1950 production figures are also based on the annual percentage increases.

Industrial Timber *Lesnaya Promyshlennost*, No 6-7, 1946, indicates the 1950 planned output as 190 million cubic metres. In *Trudy Instituta Lesa*, Vol II, 1948, it is stated that the 1950 output would be 59 per cent over 1940.

Paper *Pravda*, 12 April 1946. In *Trudy Instituta Lesa*, Vol. II, 1948, p. 44, it is said that " 1950 production will be more than four times that of 1945 ".

Window Glass. *Pravda*, 21 March 1946.

Cotton Fabrics : Tekstil'naya Promyshlennost, No. 10, 1947, p 4, gives the 1950 output as 120.6 per cent of 1940 (which results in a 1940 figure of 3,886 million metres) and 292 per cent of 1945 The 1948, 1949 and 1950 figures have been derived from the 1945 production, by applying the annual percentage increases. The 1949 figure is also based on a statement by G. M. Malenkov (10 March 1950) which says that the 1949 output was 2.2 times that of 1945.

Wool Fabrics Trud, 17 April 1946, gives the 1950 planned output in physical units and states that it will be 132.5 per cent of 1940. The 1949 figure is based on a statement by A. Kosygin, Deputy Chairman of the Council of Ministers of the U S S R , that the 1949 output surpassed 1940 by 35 per cent (*Pravda*, 21 December 1949). The 1948 and 1950 figures are based on the 1949 output by applying annual percentage increases given in the reports on plan fulfilment.

Silk Fabrics · Tekstil'naya Promyshlennost, No. 10, 1947, gives 1950 planned output in physical units and also as 203 per cent of 1940. In the speech by A. Kosygin mentioned above, it is also stated that in 1949 the output was 46 per cent greater than in 1940. The 1948 and 1950 figures are based on the 1949 output, together with the published annual percentage increases.

Leather Shoes · Lyogkaya Promyshlennost, No 3-4, 1946, indicates that the 1950 planned production in physical units was to exceed that of the last pre-war year by 17 per cent The 1948 and 1950 figures have been derived from that of 1949 on the basis of the annual percentage increases The 1949 production has been computed on the basis of G M. Malenkov's statement that output for this year was 2 6 times that of 1945 which, according to a statement by Lukin, Minister of Light Industry, was one-quarter of the planned output for 1950

Butter E Lokshin, *Soviet Industry in the New Five-year Plan*, states that the 1950 planned output of butter which is given in physical units is to be 33 per cent higher than that of 1940

Sugar · L. Volodarski, *The Post-war Five-year Plan in Action*, 1947, states that the 1950 production target, as indicated in the Plan, would be almost 250,000 tons more than in 1940

Index Numbers (1949 = 100) of Production in Eastern Europe and in the U.S S.R. in 1950 (Table XXV)

The data shown in the table have been taken from the following reports on plan fulfilment

Bulgaria Report of the State Planning Commission on the Fulfilment of the Economic Plan for 1950, *Otechestven Front* (National Front), 30 January 1951

Czechoslovakia Report of the State Planning Commission on the Fulfilment of the Economic Plan for the Second Year of the Five-year Plan, *Rude Pravo*, No. 25, 21 January 1951 The production of hard coal and lignite is given in *Hospodar* No 1, 4 January 1951.

Eastern Germany . Report of the State Planning Commission on the Fulfilment of the Economic Plan in 1950, *Statistische Praxis* No. 2, February 1951.

Hungary Report of the Central Statistical Office on the Fulfilment of the National Economic Plan in 1950, *Szabad Nép*, 23 January 1951.

Poland The Report of the State Planning Commission on the Fulfilment of the Economic Plan in 1950, *Gospodarka Planowa* No. 2, February 1951.

Rumania The Statement of the State Planning Commission on the Fulfilment of the Economic Plan in 1950, *La Roumanie Nouvelle*, No. 61, 16-28 February 1951.

Soviet Union Report of the Central Statistical Administration of the U S S R. Council of Ministers on the Fulfilment of the Economic Plan in 1950, *Soviet News*, published by the Soviet Embassy in London, No. 2475, 29 January 1951.

Yugoslavia · Report of the Federal Planning Commission on the Fulfilment of the Economic Plan in 1950, *Politika*, 21 January 1951.

V. INDEX NUMBERS OF AGRICULTURAL PRODUCTION (TABLE 14)

The index numbers of agricultural production shown in the table have been supplied by the Food and Agriculture Organization of the United Nations. They were computed according to the formula

$$\frac{\Sigma\, p_o\, q_1}{\Sigma\, p_o\, q_o}$$

where p_o = the average world export unit value of the commodity in the base period (1934-38)
q_o = the average annual production of the commodity in the base period
and q_1 = production of the commodity in the given year

The indices are essentially index numbers of gross production and relate only to current output for current use. However, gross production has largely been adjusted for duplication by deducting that part of output which is used as fodder Increases in capital, *e.g* in the form of larger herds of livestock, are not included.

The commodity composition of the index for each individual country is identical, except in so far as no figures may be available or production data could not reasonably be estimated. The same prices have been applied to the production data for each country

Details of the method of computation are given in *FAO Index Numbers of Food and Agricultural Production, Progress Report*, Food and Agriculture Organization of the United Nations, Washington, November 1950.

Index numbers calculated on the basis of a uniform commodity coverage and uniform prices for individual countries are, in many instances, different from indices published in official national publications, as will be seen from the following table :

Comparison of FAO and National Index Numbers of Agricultural Production

Country	FAO index numbers 1934-38 = 100			National index numbers				
	1947	1948	1949	Base year	1947	1948	1949	1950
Finland	87	106	108	1938		84	93	
France	77	96	96	1938	71	91		
Western Germany	64	77	84	1936	..	79	88	
Greece	89	83		1939	64	62	72	68
Hungary	64	98	94	1934-1938	71	90	87	.
Ireland	92	97	97	1937	96	94	99	
Italy	89	97	102	1938	78	85	90	
Netherlands	88	104	117	1935-1939	68	76	100	
Norway	91	100	106	1938	82	104	110	123
Spain	93	83	90	1940	111	101		
Turkey	103	118	102	1938	91	119		

NOTE — The FAO index numbers and some of the national index numbers refer to agricultural years, beginning 1 July of the year stated The two sets of index numbers are not always strictly comparable as regards coverage, *e g* the national index for the Netherlands excludes vegetables and the index for Turkey excludes livestock and dairy products

The index numbers for total European production have been calculated by the Research and Planning Division The weights refer to net agricultural output, expressed in the same prices as those used for the computation of the index numbers for individual countries, allowance having been made in calculating the weights for consumption of fertilizers and oilcakes For details, see *Economic Survey of Europe in 1949*, p 232. For Hungary, the 1949 figure shown as an FAO index number has been estimated from the 1948 index on the basis of the national index numbers for 1948 and 1949

VI. SPECIAL DATA AND CALCULATIONS RELATING TO RAW MATERIALS

(TABLES 1, 2, 30, 31, 34-37, and text, Chapter 1, p 15, and Chapter 3, p 82)

1. INDUSTRIAL PRODUCTION AND SUPPLIES OF RAW MATERIALS (TABLES 1 AND 2)

(a) *World Production and Supplies (Table 1)*

The index numbers shown in Table 1 have been calculated as follows :

World Manufacturing Output

The index has been taken from the *Monthly Bulletin of Statistics*, United Nations. The Soviet Union has been excluded and the original base 1937 = 100 has been shifted to 1946-1950 = 100.

World Output of Textiles

The index of world yarn production has been arrived at on the basis of total production of yarns, expressed in metric tons. It covers all countries for which sufficient data were available. The figures have been taken from the *Statistical Yearbook 1949-50*, United Nations, and the *Monthly Bulletin of Statistics*, United Nations. The index numbers thus obtained for cotton yarns and wool yarns have been combined with relative weights · 2 and 1, respectively.

The index for tissues has been arrived at in the same way. Where the production data are given in metres or square metres, these figures were converted into metric tons on the basis of conversion factors derived from the export statistics of the United Kingdom. Although this method is fairly rough, it is believed that the influence of possible errors on the movements shown by the index numbers is of relatively minor importance. Cotton and woollen tissues have been combined in the same way as the yarns.

World Output of Metals and Engineering Products

The index of metal production includes pig iron and those non-ferrous metals, the ores of which are included in the index of raw material output. The index has been calculated in the same way as that for raw material output, which is described below The 1948 wholesale prices in the United States, as well as the production data for 1950, have been taken from the *Monthly Bulletin of Statistics*, United Nations Production figures for previous years have been derived from the *Statistical Yearbook 1949-50*

The engineering index includes the United States and Europe only. However, these two regions cover at least 80 per cent of total world engineering output.

The index for the United States has been derived from the *Statistical Abstract of the United States 1949* and *Survey of Current Business* The index numbers shown in these two publications for transportation equipment and machinery have been combined, with relative weights (1935-39) . 35 4 and 64.6, respectively The original base 1935-39 = 100 has been shifted to 1946-50 = 100.

The index for Europe has been taken from Table 9 of this SURVEY. The two indices for the United States and Europe have been combined on the basis of finished steel consumption, with relative weights (1946) 73 1 and 26.9, respectively

World Production of Raw Materials

The index of world output of raw materials reflects the movements of their gross production value in constant 1948 United States prices. It has been calculated according to the formula

$$I_1 = \frac{\Sigma q_1 p_{48}}{\Sigma q_0 p_{48}}$$

where

q_1 = quantity produced during year 1
q_0 = average quantity produced in 1946-1950
p_{48} = United States wholesale price in 1948

The commodities included are . iron ore, copper ore, lead ore, zinc ore, tin ore, bauxite, rubber (natural and synthetic), sulphur (including S-content of pyrites), raw cotton, raw wool and wood-pulp.

The price data have been taken from the *Monthly Bulletin of Statistics*, United Nations (for rubber, raw cotton, raw wool and wood-pulp), *Statistical Abstract of the United States* (for iron ore) and the *Minerals Yearbook*, Bureau of the Mines (for non-ferrous metal ores and sulphur). The prices of ores have been converted into dollars per unit of metal content. In the absence of wholesale price quotations, United States import unit values have been taken to value the output of non-ferrous metal ores

All production data have been taken from the *Statistical Yearbook 1949-50*, United Nations, and, for 1950, from the *Monthly Bulletin of Statistics*, United Nations, with the following exceptions

Tin *Statistical Bulletin*, International Tin Study Group, The Hague.

Other non-ferrous metal ores The 1950 figures have been estimated on the basis of figures shown in *The Iron Age*, New York.

Rubber *Rubber Statistical Bulletin*, International Rubber Study Group, London

Sulphur The 1950 figure has been estimated on the basis of the production in the United States, by far the most important producer of sulphur Source . *Survey of Current Business*

Raw Cotton *Cotton*, International Cotton Advisory Committee, Washington.

Raw wool *Wool Intelligence*, Commonwealth Economic Committee, London.

(b) *Industrial Production and Supplies in Particular Countries (Table 2)*

The same general method of comparing index numbers of industrial activity on the one hand, and supplies of industrial raw materials on the other, has been applied, on a national scale, in Table 2

For each of the countries considered, two quarterly index numbers (1949 = 100) have been computed, showing the movements of industrial activity and raw materials supplies (excluding fuels) The ratio of these two index numbers indicates in what way the relation between current supplies and current industrial requirements differs, in any given quarter, from the average relation prevailing in the year 1949.

Index Numbers of Industrial Activity

The index numbers have been computed on the basis of the official production indices, the sources for which are indicated above in section II, 3. However, in order to arrive at indices comparable with the index numbers of raw materials supplies which are described below, the component series of the general index numbers of industrial production have been reweighted according to the value of the raw materials included in the calculation described below, processed by the various industries during the base year These relative values of raw material input were estimated from various sources, mainly censuses of production, carried forward, where necessary, to the base year.

Index Numbers of Supplies of Raw Materials

The index numbers are intended to show variations in apparent consumption, *i.e.* production plus imports minus exports, of the principal raw materials. No account is taken of changes in stocks. The following raw materials have been considered in all countries, with the exceptions noted.

Raw cotton (including linters)
Raw wool and wool tops
Jute, flax, hemp and other textile fibres (except Italy)
Hides and skins
Rubber
Timber (except France)
Wood pulp
Iron ores and concentrates
Steel scrap (trade only) (except United States and France)
Bauxite (United States and France only)
Aluminium (except France)
Copper (including ores and concentrates)
Lead " " " "
Nickel " " " " (except France)
Tin " " " "
Zinc " " " "
Sulphur and pyrites (except western Germany and Italy)
Potash (except United States and Italy).

The figures on apparent consumption, or supplies, which are expressed in physical units, have been weighted at 1949 average domestic wholesale prices as regards home production, and at average 1949 import and export unit values as regards imports and exports, respectively. Items which were found to be insignificant in global value were omitted as noted in the foregoing list. In Italy, moreover, home production was in all cases found to have a negligible effect on supplies and was therefore left out of consideration The necessary adjustments have been made to avoid double counting throughout The data on home production have been taken mainly from the following sources

United States *Survey of Current Business.*

United Kingdom *Monthly Digest of Statistics.*

Germany
Western zones *Wirtschaft und Statistik.*

France *Bulletin mensuel de statistique.*

Italy : *Bollettino mensile di Statistica.*

The figures on imports and exports are from the official trade statistics.

2. Prospective Rise in Export Proceeds of Overseas Primary Producing Countries *(see text, Chapter 1, p. 15).*

The calculation referred to in the text of Chapter 1, p. 15, has been made as follows. The imports of the United States and of Europe from the rest of the world during the period from October 1949 to September 1950, which largely precedes the full impact of the Korean war on world trade in raw materials as regards both volume and prices, have been determined from the national trade statistics for the major foodstuffs and industrial raw materials. The commodities considered are :

Bread grain	Crude oils
Coarse grain	Refined liquid fuels
Oils, fats and oilseeds	Non-ferrous ore concentrates
Sugar	Copper (unwrought)
Meat	Lead
Coffee	Tin
Tobacco	Raw cotton
Cocoa beans	Raw wool
Oilcakes and feeding-stuffs	Raw hides and skins
	Crude rubber

Together, these commodities accounted for about three-quarters of the exports of primary producing countries to the United States and to Europe during the twelve-month period from October 1949 to September 1950.

In order to arrive at an approximate minimum estimate of the dollar proceeds which the exports of foods and feeding-stuffs and raw materials from the overseas primary producing countries to the United States and Europe might reach, representative world prices for each of the commodities listed were chosen for May and December 1950, and the change in these representative prices from the first to the second period was then applied to the export values of the 19 commodities listed. The increase in total value thus calculated amounted to $3 2 billion

The estimate of $3 to $4 billion given in the text of Chapter 1 must be considered as a minimum estimate, for the following two reasons In the first place, no allowance is made for any price increase in other foodstuffs and raw materials which from October 1949 to September 1950 accounted for about one-fourth of the total export proceeds. Second, prices in May 1950, while preceding the outbreak of the Korean war, were on the whole higher than the average for the period considered, while prices in December 1950 were still substantially below the level they reached during the first five months of 1951, and are to that extent likely to be exceeded by average prices received by overseas primary producing countries for their exports during the current year.

3. Production, Consumption and Stocks of Particular Raw Materials (Tables 30, 31, 34-37)

(a) *World Production and Consumption of Non-ferrous Metals (Tables 30 and 31 and text, Chapter 3, p 82)*

General

In view of the fact that data on the production of secondary metal are either not available, unreliable or non-comparable, the data relate throughout to primary metal only. However, it has not always been possible to limit the consumption data in this way, particularly as regards copper and aluminium for the United States, Germany and Japan.

World Production

Production data have been taken from the *Statistical Yearbook 1949-50* and the *Monthly Bulletin of Statistics*, United Nations An adjustment has been made in the pre-war world production figures to include only the western zones of Germany on the assumption that all tin metal, about three-quarters of the aluminium and zinc, one-quarter of smelter copper produced, and most of the lead refined in Germany in 1936-38, was produced in the western zones The 1950 estimates for the production of all metals in Yugoslavia are approximate For lead, the United States production includes antimonial lead of which a substantial proportion is derived from scrap

World Consumption

For the United States and the United Kingdom, the consumption statistics relate to the actual consumption by fabricators, *i e* allowing for changes in stocks held by producers, the Government, traders and fabricators. For other countries stock changes have been taken into account only in so far as information is available The sources used for copper, lead and zinc are the *Yearbooks* and *Reports* of the American Bureau of Metal Statistics Where the consumption data in these publications are stated to have a limited coverage, or to include large amounts of scrap, the figures were adjusted on the basis of data shown in *Statistiques, Cuivre, plomb, zinc, étain, aluminium, argent, or*, Minerais et Métaux, Paris 1950, and of national sources on production and trade.

Figures on aluminium consumption are available only for the United States and the United Kingdom. For other countries included under " Rest of the World " the consumption data have been obtained by difference, *i e* by deducting United States consumption and net exports to the Soviet Union and eastern Europe from world production, adjusted for stock changes

The data on tin have been taken from the *Yearbooks* and *Bulletins* of the International Tin Study Group

With regard to all non-ferrous metals, world consumption has been adjusted to include only the western zones of Germany in 1936-38

The net exports to the Soviet Union and eastern Europe include exports to Bulgaria, Czechoslovakia, Hungary, Poland and Rumania The data are taken, for the pre-war period, from the trade statistics of these countries, and, for post-war years, from the trade statistics of the supplying countries

Strategic Stocks

For the years 1948-1950 the figures shown relate to the United States only. While data on strategic stock-piling by commodities are not published officially, the estimates have been assembled from scattered information published in the world Press, from various United States official statements and from independent calculations of the difference between total disappearance and total consumption by fabricators The estimates for the year 1951 relate to the United States and the United Kingdom only For the United States, these estimates are based on indications available in April 1951 of stock-piling plans For the United Kingdom, the estimate is based on the stock levels during World War II, and on the planned expenditure by the Ministry of Supply during 1951. The margin of error to be attached to these estimates is large

Residual

These residuals are the product of a number of miscellaneous factors · no allowance is made for the net imports of eastern Germany of metal produced outside the Soviet Union and eastern Europe ; the impossibility of excluding, in certain cases, secondary metal , errors in the estimates of strategic stocks and, finally, changes in commercial stocks are also included in the residuals

Defence Production Requirements in 1950 and 1951 (Chapter 3, p. 82)

The estimates in Chapter 3, p. 82, of the probable requirements of the various non-ferrous metals for the armaments programmes refer to the requirements of the United States and western Europe

Requirements for the major metals have been published only for France (*Le Monde*, 9 February 1951) For the United States and the United Kingdom, the estimates have been drawn up on the basis of total supplies of each non-ferrous metal in 1950, the expected supplies in 1951 and the proportions of these supplies likely to be devoted to defence production In the case of the United States, the estimates were reviewed in the light of indications as to requirements which have appeared in the press, in the *Economic Report of the President*, January 1951 and in *Building America's Might*, Office of Defense Mobilization, April 1951. It has not been possible to find similar confirmation for the estimates drawn up for the United Kingdom. For other western European countries, the increase in estimated requirements between 1950 and 1951 has been based on the increase in defence expenditure according to the national budgets

The results of these various estimates are, of course, subject to very wide margins of error.

(b) *World Production and Consumption of Raw Cotton, Raw Wool and Rubber (Tables 34-36)*

The data have been taken from the following sources ·

Cotton *Report on the Developing World Cotton Situation*, International Cotton Advisory Committee (ICAC), May 1950
Cotton, Quarterly Statistical Bulletin, ICAC, September 1950
Cotton, Monthly Review of the World Situation, ICAC

Wool . *World Wool Digest*, International Wool Secretariat, especially issue of 20 December 1950
Wool Intelligence, Commonwealth Economic Committee (CEC)
Commodity Reports, Wool, Food and Agriculture Organization of the United Nations (FAO) March 1950.
World Fibre Survey, FAO, 1947.
Textile Fibres, CEC, 1951.

Rubber *Rubber Statistical Bulletin*, Rubber Study Group
Synthetic Rubber, Recommendations of the President transmitted to the Congress, Washington, January 1950
Plantation Crops, CEC, 1950

The figures for wool consumption are given for calendar years, whereas production data refer to seasons. The figures on world consumption for the seasons shown in Table 35 have been obtained by averaging two consecutive calendar years

In order to exclude in all the three tables the Soviet Union and eastern Europe for which estimates of production and consumption are not complete in the sources listed above, certain additional estimates had to be made. In particular, the consumption of cotton, wool and rubber in the Soviet Zone of Germany has been estimated on the basis of the regional distribution of output in the consuming industries, as shown in the industrial census of 1936

The strategic stocks of rubber, which are not included in the data on stocks contained in the publications listed above, and hence are also excluded from the stock figures shown in Table 37, have been estimated as a residual by comparing imports, consumption and changes in recorded stocks This residual must be considered as a conservative estimate, as the American stockpile was believed to be 450,000 tons even at the end of 1949 (see *The Economist*, 10 February 1951)

(c) *Visible Stocks of Selected Raw Materials (Table 37)*

The sources from which the data in the table have been taken are the following :

Non-ferrous metals For copper, lead and zinc all series relating to British countries are taken from the *Bulletins of the British Bureau of Non-Ferrous Metal Statistics*. All United States data and the copper data for " other producers " are from the *Yearbooks* and *Reports* of the American Bureau of Metal Statistics, from which additional information has also been received directly The figures on aluminium in the United States are from *Minerals Yearbook*, United States Department of the Interior. All data on tin are from the *Statistical Bulletin* of the International Tin Study Group.

Natural Sulphur The United States figures are from the *Survey of Current Business*. The United Kingdom figures are from the *Monthly Digest of Statistics*

Cotton, Wool and Rubber The figures have been taken from the publications listed in the preceding section.

VII. NUMBERS OF LIVESTOCK, ELECTRIC GENERATING CAPACITY AND VARIOUS TYPES OF EQUIPMENT GOODS (TABLES 13, 15, VII, XIX AND XXI-XXIII)

Livestock Numbers in the U S S R (Table 13)

Total Livestock

1928 and 1945 : A Baykov, " Agricultural Development in the U.S.S R. ", (*Bulletins on Soviet Economic Development*, No. 2, Birmingham 1949).

1937—pre-war territory . *Draft of the Third Five-year Plan for the Development of the National Economy of the U S S.R. 1938-1942*, Moscow 1939 (in Russian)

1937—post-war territory : *Annuaire de Statistique agricole 1938-1939*, Rome 1939 ,
Maly Rocznik Statystyczny 1939, Warszawa 1939 ;
Statistisches Jahrbuch fur das Deutsche Reich, 1939-1940 ,
Anuarul statistic al Romaniei 1939 si 1940, Bucuresti 1940

1950 : *Soviet News*, 29 January 1951

Livestock in Collective Ownership

1937 and 1940 *Draft of the Third Five-year Plan*, quoted above , N Voznesenski, *Voennaya Ekonomika SSSR v period otechestvennoi voiny*, Moscow 1947.

1950 . Statement by N. A Bulganin (*Bolchevik* No 21, 1950).

Numbers of Cattle and Pigs (Table 15)

The figures for cattle include both dairy and other cattle

The data shown for the various countries refer, for the pre-war period, to the latest estimate up to 31 December 1939, for post-war years to the count or estimate nearest to 1 January in the twelve months extending from 1 October to 30 September of the years indicated Therefore, the data given do not necessarily relate to the same dates for different countries However, the data for the same country relate to approximately the same dates for all years

The figures have been supplied by the Food and Agriculture Organization of the United Nations They are based on Government replies to questionnaires and official government publications, supplemented by estimates of the F A O secretariat The latter estimates, however, are in most cases based on data given in various national official or semi-official publications

In a few instances where national publications show more recent figures than those communicated by the Food and Agriculture Organization, these national figures have been given preference Sometimes, for reasons of comparability, *e g.* if these data refer to dates different from those for previous years, the figures for previous years have had to be adjusted as well

Electric Generating Capacity (Table VII)

The figures relate to the electric generating capacity, including the capacity of private industrial generating electricity for their own use, unless otherwise stated in the footnotes to the table

The figures which have been supplied by the Power Section of the Power and Steel Division, Economic Commission for Europe, have, in most cases, been communicated by the authorities of the countries concerned The data occasionally differ from statistics given in national publications, mostly because the coverage in national sources is less comprehensive For countries from which no official replies to questionnaires have been received, the data have been taken from national sources.

Stock of Commercial Vehicles (Table XIX)

The figures relate to lorries, 'buses, tractor and semi-trailer combinations Taxis, hired cars, trolley-buses, trailers, farm and road tractors are excluded.

The figures, which have been supplied by the Transport Division, Economic Commission for Europe, have, in most cases, been communicated by the authorities of the countries concerned For countries from which no official replies to questionnaires have been received, the data have been taken from national sources

The figures for France and Italy for 1950 have been estimated on the basis of net additions to the stock, *i e* production minus net exports, with an allowance for withdrawals The 1950 figure for the United Kingdom, which has been estimated on the basis of figures shown in the *Monthly Digest of Statistics*, has a slightly different coverage from data relating to other years

Numbers of Railway Locomotives and Number and Capacity of Railway Wagons (Tables XXI and XXII)

The figures which have been supplied by the Transport Division, Economic Commission for Europe, have, in most cases, been communicated by the authorities of the countries concerned. For countries from which no official replies to questionnaires have been received, the data were taken from *Statistique Internationale des Chemins de fer*, Union internationale des Chemins de fer, and from national sources.

The figures differ sometimes from those shown in other international and national publications, mainly because of differences of definition, *e.g.* the figures shown may refer to standard gauge only, whilst national statistics give narrow gauge as well. The definitions adopted are not the same in all countries since, for each country, those series have been taken which are comparable for pre-war and post-war years

The data shown refer to standard gauge only in the case of Austria, western zones of Germany, Italy, Luxembourg, Portugal, Switzerland and the United Kingdom. In the case of Norway, the pre-war figures include narrow gauge ; for post-war years narrow gauge is excluded. It is believed, however, in view of the extensive conversion of narrow gauge wagons into standard gauge, that in this way the most comparable figures are obtained. For all other countries the figures shown include both standard and narrow gauge.

Numbers of Tractors on Farms (Table XXIII)

The figures relate to stocks of agricultural tractors, including two- and three-wheel and tracklaying tractors, but excluding garden tractors. The figures, which have either been communicated by the authorities of the countries concerned, or are estimates based on additions and scrapping, have been supplied by the Industry and Materials Division, Economic Commission for Europe. In addition, the following sources have been used :

Austria · *Statistische Nachrichten*, 1947, No. 3, p. 54.

Belgium *Commodity Report*, Chapter C, Agricultural Machinery, E.C.A , 1948, p 3.

Bulgaria *Obzor bolgarskogo selskogo hozjaistva i danie o kooperativnom zemlepolzovanii i Bolgarii*, Prague, 1947, p 21 ; *Free Bulgaria*, 19 June 1949. The 1950 figure has been obtained from the Plan Fulfilment Report.

Czechoslovakia : *Annuaire Statistique 1938*, p. 118 ; *Czechoslovak Five-year Plan , Bulletin*, National Bank 1949, Nos 11-12. The 1950 figure has been obtained from the Plan Fulfilment Report.

France : *Statistique Agricole Annuelle*, 1939, p. 219 ; *Usine Nouvelle*, 1 March 1951.

Germany .

Western zones · *Statistische Berichte*, 26 June 1950.

Soviet Zone *German Economic Press Review*, 3 November 1949 and 10 November 1949 , *Soviet Monitor*, 24 July 1950.

Greece : *Survey of the Farm Machinery Situation in Europe*, Food and Agriculture Organization of the United Nations

Hungary *Beszélö Számok*, 1949, No. 1, Statistical Department of the National Trade Union Council ; *Szabad Nép*, 5 February 1950 and 23 January 1951.

Netherlands : *Commodity Report*, Chapter C, Agricultural Machinery, E C.A , 1948, p. 3.

Poland : *Gospodarka Planowa*, 1948, No. 7 and 8, 1950 No 1 and 1951 No 1 ; *Trybuna Ludu*, 1949, No. 13

Rumania *Annuarul Statistic* 1939/40, p. 516, *Recensământul Agricol din Republica Populară Română*, 1948, p. 31 ; *Informations Roumaines*, 22 February 1950, Paris ; *La Roumanie Nouvelle*, 28 February 1951

Sweden The pre-war figures shown in various sources vary from 10,000 (*Survey of the Farm Machinery Situation in Europe*, Food and Agriculture Organization of the United Nations) to 22,500 (*Commodity Report*, Chapter C, Agricultural Machinery, E C.A.) A figure of 20,000 has been taken.

Switzerland : *Commodity Report*, Chapter C, Agricultural Machinery, E.C.A., p 3. *Bulletin*, C.I.G.R , Morges, August 1948.

United Kingdom : *Agricultural Machinery*, Political and Economic Planning, London, 1949

Yugoslavia *Borba*, 28 April 1950 ; *Rapport Annuel 1950 du Gouvernement de la R.F Y. à l'Organisation des Nations Unies pour l'Alimentation et l'Agriculture.*

VIII. NATIONAL INCOME AND INVESTMENT (TABLES 23-25, 65 AND XXVI)

1. Gross and Net National Income and Indirect Taxes Net of Subsidies (Table XXVI)

All data are given in national currency at current prices.

The figures of gross national income have, as far as possible, been adjusted with a view to making them more comparable as between countries. In particular, an attempt has been made to adjust the figures on gross capital formation to a common definition, mainly by including only depreciation proper, but excluding maintenance and repair. These adjustments are described below in Section 3.

The data on net national income are also fairly comparable, in so far as it may be assumed that any differences in the national definition of gross investment are compensated by corresponding differences in the national definition of depreciation, etc. Other adjustments have been made, along the lines set out in *National Income Statistics 1938-1948*, Statistical Office of the United Nations, 1950, Chapters II and IV.

The data given at factor costs may be converted into data at market prices by adding the figures for indirect taxes net of subsidies given in the table.

2 Gross Investment in Fixed Capital (Tables 23-25)

Fixed capital is defined as including buildings and other constructions, machinery and transport equipment, but excluding both armaments and constructions for defence purposes and consumers' capital other than dwellings. Private cars are included if purchased on business account Gross investment in fixed capital covers all expenditures incurred for the purpose of installing new fixed capital, whether for replacement or renewal or for addition to capacity, and the reconstruction of fixed capital All expenditure on current maintenance and repairs is excluded As the concept of gross investment used by a number of countries does not conform to this definition, adjustments have been made to the original figures details of which are set out below under the country headings.

As a consequence of the exclusion of current maintenance and repair expenditures from gross investment, the relative levels of investment between countries and between economic sectors within countries are somewhat different from the figures given in last year's Survey Moreover, for a number of countries, figures have been corrected in the light of later and revised information which has become available.

The calculation of net investment has been abandoned. Although it is in principle comparable from one country to another, comparisons suffer from a large degree of error due to the arbitrary element in the calculation of capital consumption. In past years, national estimates of capital consumption were adjusted so as to make net investment in a given country comparable from one year to another, but because of the varying practices used by the different countries in estimating capital consumption, it was not possible to make fully valid comparisons of net investment as between countries

No change has been made to the definition of the economic sectors used in last year's Survey. " Agriculture, fishing and forestry " includes expenditure on equipment, on constructions and on land improvements, but excludes the value of the change in livestock, in the stock of uncut timber or growing crops These are treated as investment in stocks. " Transportation and communications " includes the value of improvements made to roads but excludes vehicles purchased by other than transport undertakings. " Government and other sectors " includes investment by trade and commerce and by public authorities in public works, schools, hospitals, administrative buildings, etc. but excludes expenditure for military and defence purposes

There were three stages in the conversion of the original figures in national currencies at current prices into United States dollars at 1950 prices First, the data were deflated to 1938 prices by the national indices of investment costs given in the table below, whose derivations are set out under the separate country headings. Second, the deflated figures in national currencies were converted into dollars at 1938 prices by the estimated parity exchange rates for industrial goods, first given in the 1948 Survey [Table B, p. 231, and (for Poland) p. 258]. Finally, the figures for each year in 1938 dollars were reconverted to 1950 dollars by applying the percentage increase between the year in question and 1950 of the United States price index for investment goods. Thus, in principle, the data are fully comparable between countries and changes in relative investment costs from pre-war to post-war are thus eliminated. However, it should be noted that, since the parity rates are based on the prices of industrial goods, they may not be fully representative of the relative levels of prices for investment goods in the different countries in 1938, particularly in the case of buildings and other constructions. But although it is not yet possible to improve on these rates, it is believed that they come substantially nearer to indicating the relative price levels of investment goods than the official exchange rates of 1938.

The implied parity exchange rates for converting investment in national currencies in 1950 prices to U S dollars in 1950 prices, together with the official exchange rates for 1950, are also shown in Table E. The exchange rates implied for the other years may, of course, be derived from the movements in the investment cost indices.

Table E

INDEX NUMBERS OF INVESTMENT COSTS

Country	Level of investment costs				Exchange rate 1950 (US cents per unit of national currency)	
	1938 = 100	1947 = 100				
	1950	1948	1949	1950	Estimated parity rate	Official rate
Austria	615 [a]	100 *f*	115 *f*	126 *f*	4 19	4.65
Belgium	380 [b]	106	109	113	1 65	2.00
Denmark	223	107	111	116	15 2	14 5
Finland	1,440	127	128	154	0.249	0 435
France	1,770	172	194	208	0 316	0 286
Germany : western zones	199 [c]	100 *f*	97 *f*	95 *f*	26 2	23 8
Ireland . .	238	107	108	111	358 0	280 0
Italy	5,190	113	109	110	0 177	0 160
Netherlands .	320	104	105	114	32 2	26 3
Norway .	252 [d]	116	121	126	15 1	14 0
Poland	10,000 [e]	127	.		0 300 [e]	0 980 [e]
Sweden	195	106	108	111	22 4	19 3
Switzerland	230	106	107	106	18 6	23 1
United Kingdom .	238	107	109	111	358 0	280 0
United States	195	121	119	123		

[a] 1937 = 100 [b] 1936-38 = 100. [c] 1936 = 100 [d] 1939 = 100 [e] 1948 [f] 1948 = 100.

3. Real Volume of Expenditure and Output in 1950 (Table 65)

The data on which the index numbers shown in Table 65 are based have originally been derived from the sources listed below However, the published figures have been subjected to adjustments and transformation as described in the following.

The volume of personal consumption in constant prices was available for Austria, western Germany, Sweden and the United Kingdom. These countries also gave Government consumption in constant prices, except the United Kingdom, where the current value of Government consumption was deflated by the price index derived by comparing personal consumption at current and constant prices For Denmark, France, Ireland and Norway, consumption was deflated by the official cost-of-living indices, while the general wholesale price index was used for Finland, where the cost-of-living index under-estimates the price increase (see Bank of Finland, *Monthly Bulletin*, Nos 9-10, 1950, p 2) In the case of the Netherlands, the cost-of-living index had to be adjusted downward (by about 2 to 3 per cent) because the unadjusted cost-of-living index was inconsistent with data on national output in current and constant prices. The figures on capital formation at home (including changes in business inventories) have been estimated by deflating the data in current prices by the investment cost indices given in Table E The indices of imports and exports are those given in Table XXVII Real output was taken from national sources, except in the case of Ireland and the United Kingdom, where it was estimated by adding up the national expenditure at constant prices In the case of the United Kingdom, the estimate of real output includes changes in the invisible items of the balance of payments (deflated by the official export price index) The figures on terms of trade are derived from Table 42 and *Monthly Bulletin of Statistics*. They were weighted into an annual average by the quarterly volume data shown in Table XXVII. The figures for real income have been estimated by adjusting the real output for the loss which occurred through deteriorating terms of trade This loss was estimated by subtracting from real output the difference between the actual trade deficit of 1950 and the trade deficit (surplus) which would have been the outcome if the 1950 commodity trade had been carried out at 1949 prices.

4. Sources and Notes

The following abbreviations are used .

G I. – Gross investment
I.C. = Investment costs
I T. Indirect taxes, net of subsidies.

The note relating to each country deals with :

A Gross and net national income, and

B. Gross investment in fixed capital.

Austria (1) Estimates communicated by the *Österreichisches Institut fur Wirtschaftsforschung* ,
(2) *Gesamtschau der osterreichischen Wirtschaft in den Jahren 1948 und 1949* Österreichisches Institut fur Wirtschaftsforschung, Sonderheft 7, Wien 1950.

A. The data are from (1) and are also published in (2) For 1948 and 1950, I T were estimated from the budgets of the public authorities. Depreciation in 1950 was assumed to represent the same proportion of gross national income as in 1949

B. G.I. and I C. from (1)

Belgium (1) P van der Meiren, " National Income, Gross National Expenditure and Related Totals in Belgium, 1938 and 1946-1949 ", *Economica-Documentatie*, Vol. 1, No 1, August 1950 (Louvain, Belgium).
(2) *Quatrième rapport relatif au problème des investissements*, Ministère de la coordination économique et du réequipement national
(3) *Cinquième rapport relatif au problème des investissements*, Ministère des Affaires économiques et des Classes moyennes.
(4) Complementary information from the Ministère des Affaires économiques et des Classes moyennes

A. Data up to 1949 from (1) 1950 has been estimated on the basis of agricultural and industrial production and wholesale prices. I T. were taken from the public budgets.

B. G I in fixed capital total, by economic sectors and by branches of industry for 1947 from (2) , for 1948 and 1949 from (3) An estimate of the expenditure on current maintenance and repairs included under public works was deducted from the Transportation and the Government sectors Investment in coal miners' dwellings was shifted from the Industry to the Dwellings sector. The published figures for 1949 were adjusted downwards on the basis of (4) The estimates of G.I. for 1950 are provisional, based on information given in (4) For all years investment for military purposes was deducted

The I C index number is the simple average of (*a*) an average of the official wholesale price index number of construction materials and an index of earnings in construction , and (*b*) the official wholesale price index numbers of metals and metal products.

Czechoslovakia (1) Estimates (prepared by M Stadnik) communicated by the Government ,
(2) *Hospodář*, 6 April 1950 ,
(3) *Prubeh plneni hospodařskeho planu*, Rok 1947
(The Fulfilment of the Economic Plan 1947) ,
(4) *Vsemi hlasy pro petiletku*, Ministry of Information, 1949, p 199 ,
(5) Speech by M J Dolanský, Minister of Planning, 23 Jan 1951 ,
(6) *Statistický Zpravodaj* No 3, 1949

A Figures for 1948 from (1), for 1949 from (2) Depreciation was assumed to be 8 per cent of net national income

B Although Czechoslovakia has not been included in Tables 23-25, it is thought useful to show here the following official estimates of G I in current prices (in billion Kčs) · 1947 25 , 1948 · 30-35 , 1949 65 ; 1950 : 92 These figures have been obtained as follows · 1947 from (3), 1948 from (4), 1949 and 1950 from (5) Moreover, it is known from (6) that the value of building activity in 1947 amounted to 15 1 and in 1948 to 24 2 billion Kčs

It has not been found possible to express these data in terms of constant prices as the changes in I C. since 1947 are not known. The official wholesale price index number, which has not been published since September 1949, refers to controlled prices. I.C , especially building costs, are known to have risen considerably more.

Denmark (1) *Statistiske Efterretninger*,
(2) *Statistisk Årsbog 1950*,
(3) *Economic Survey of Denmark, National Budget for 1949* ,
(4) *Economic Survey of Denmark, National Budget for 1950*
(5) Information received from the Department of Statistics, Copenhagen

A. Data from (1), No 1, (2) and (5) Depreciation for 1950 is assumed to represent the same proportion of net national income as in 1949

B. Total G I in fixed capital 1947 to 1950 from (5). Expenditure on repairs (amounting to 29-36 per cent of the total) was estimated on the bas s of information given in (3), (4) and (5) Investment in agriculture 1947 to 1949 from (1), No. 11, 1950, investment in dwellings 1947 to 1950 from (5) Investment by branches of manufacturing industry 1947 to 1950 was estimated on the basis of data given in (1), Nos 18, 1949, 28, 1950, and 13), 1951, for a sample of

firms; G I. in each branch being obtained by inflating the figures given by the reciprocal of the sampling fraction (employment) shown for each branch and adjusting the results so that the totals agree with the final official estimates. For 1947, expenditure on dwellings was deducted, for 1950, the official estimate for final investment was taken. The I.C. index 1938 to 1947 given in (2), p. 265, was linked to the index for 1947 to 1950 given in (5).

Finland. (1) Estimates communicated by the Central Statistical Office of Finland ;
(2) *Economic Survey of Finland*, Economic Department of the Ministry of Finance, Helsinki 1950.

A. Data from (1) and (2).

B. G.I. totals for 1947 to 1950 from (1) and (2), by economic sectors 1947 to 1950 from (1) For each year a deduction of about 30 per cent was made to exclude current maintenance and repairs from total investment. It was not found possible to make similar adjustments to the figures for investment by economic sectors.

The I.C index for 1938 to 1949 is given in (2), p 6. This was extrapolated through 1950 on the basis of the price indices of capital goods and machinery imports and the official building cost index

France · (1) Estimates communicated by the Commissariat général du Plan and the Ministère des Finances et des Affaires économiques ;
(2) *Rapport sur les comptes économiques de la Nation*, Ministère des Finances et des Affaires économiques, Paris 1951 ;
(3) *Deuxième rapport de la Commission des investissements*, Ministère des Finances et des Affaires économiques, 1949 ;
(4) *Troisième rapport de la Commission des investissements ;*
(5) *Etat des opérations du plan de modernisation, 1950, et d'équipement*, Commissariat général du Plan, 1949.

A Data for 1948 from (1), for 1949 and 1950 from (2)

B. Total G I in fixed capital 1947 and 1948 from (1), 1949 and 1950 from (2). Current maintenance and repair expenditure which was deducted for each year, was taken at some 55 per cent of the value of building work included in the G.I. figures, *i e.* at about 25 per cent of total G I G I. by economic sectors for 1949 and 1950 was estimated from information given in (4) and (1) The figures in these sources are, however, not comparable with those given above as they exclude privately financed renewals of equipment (" renouvellement "), but include expenditure on current maintenance and repairs if financed from public funds. The figures were adjusted by deducting an estimate of the large volume of repairs included under " Dwellings " and adding back an estimate of renewals net of repairs to the " Industry " and to " Government and Other " sectors. It was assumed that the maintenance items included under the other two sectors were offset by the renewals excluded. Investment in coal miners' dwellings given in (4) and (5) was shifted from coal mining to " Dwellings ", while an estimate of investment in roads and in the P.T T , included under " Government " in 1949, was transferred to " Transportation ". For all years investment for military purposes was deducted

The I C. index is given by (1)

Germany

Western zones (1) *Wirtschaft und Statistik*, December 1950 ,
(2) *Bericht der Bundesrepublik Deutschland uber die wirtschaftliche Lage und die Entwicklungsmoglichkeiten bis zum Jahre 1952/53* (Deutscher Beitrag zum 3. Bericht der OEEC), Bonn, February 1951 ,
(3) *Mitteilungen des wirtschaftswissenschaftlichen Instituts der Gewerkschaften*, February 1951 ;
(4) Estimates communicated by the Bundesministerium fur Wirtschaft

A. Data from (1) and (2)

B. Total G I. in fixed capital for 1948 to 1950 from (3) , G I by economic sectors for 1949 based on data supplied by (4), for 1950 on the percentage distribution given in (3), p 5, footnote 8 The figures of G I by branches of industry are broad estimates based on the forecast for 1950/51. The figures exclude expenditure on current maintenance and repairs. The I.C. index is given in (3)

Greece (1) *Monthly Bulletin of Statistics*, United Nations ,
(2) *To Vima*, 3 January 1951.

A. Figures for 1948 and 1949 from (1). The figures for 1950 are estimated from data given in (2) It has been assumed that depreciation amounts to about 5 per cent of national income. I.T. are derived from budget data.

Hungary ·

B. Although figures of total investment in terms of current prices are available, they have not been utilized as changes in the level of prices since 1948 are not known Total G I for 1950 is given in a speech by the Minister of Planning, reported in *Szabad Nép*, 7 January 1951. The percentage distribution of directly productive investments for 1950 is given in the official report on the fulfilment of the Economic Plan for 1950. Investment in dwellings and in other social buildings is assumed to be equal to the planned figures given in *Képes Figyelo*, Budapest, 7 Jan. 1950, and *Szabad Nép*, 18-22 June 1950.

Ireland : *Tables of National Income and Expenditure, 1938 and 1944-50*, compiled by Central Statistics Office, Dublin, 1951.

A. Data from the source quoted.

B. G.I. for 1947 to 1949 and the I C. index 1938 to 1949 are from the source quoted. The figures exclude expenditure on current maintenance and repairs.

Italy : (1) *Annuario Statistico Italiano*, 1949-50 ;
(2) *Compendio Statistico Italiano*, 1949-1950 ;
(3) *Relazione Generale sulla Situazione Economica del Paese*, Camera dei Deputati, Doc. IX, N 2, 1951 ;
(4) *Adunanza Generale Ordinaria dei Partecipanti*, Banca d'Italia, May 1949 ,
(5) *Adunanza Generale Ordinaria dei Partecipanti*, Banca d'Italia, May 1950 ;
(6) Complementary information from the Bank of Italy.

A Data were taken from (1), (2) and (3) Net interest and dividends paid abroad were assumed to be the same in 1950 as they were in 1949 Government services rendered to the private sector have been included, while donations from abroad were excluded

B. G.I. in fixed capital totals and by sectors for 1947 from (3), 1948 and 1949 from (4), 1950 from (5). On the basis of (5), investment in livestock was deducted from Agriculture and investment in dwellings separated from Public Works. Investment by branches of industry 1949 and 1950 from (5) The figures exclude expenditure on maintenance and repairs.

The I.C. index average of *(a)* the official wholesale price index of engineering products, and *(b)* an index of dwelling and industrial construction costs given in *Index*, Centro per la Statistica aziendale.

Netherlands · (1) *Statistisch bulletin van het Centraal Bureau voor de Statistiek*, No. 28, 1951 ;
(2) Estimates communicated by the Centraal Planbureau ;
(3) *Statistische en Econometrische Onderzoekingen*, Centraal Bureau voor de Statistiek, March 1949.

A. Data were taken from (1).

B. G I. in fixed capital, total and by economic sectors, for 1947 to 1950 and investment by branches of industry for 1948 and 1949 from (2) The figures exclude expenditure on current maintenance and repairs and military investment.
The I C. index given in (3) has been brought up to date by information given in (2)

Norway (1) *Nasjonalbudsjettet 1950*, St. meld. No. 1, 1950 ;
(2) *Nasjonalbudsjettet 1951*, St meld. No. 1, 1951 ;
(3) *Økonomisk utsyn over året 1950*.

A. Data were taken from (1) and (2). Depreciation in 1950 was assumed to represent the same proportion of national income as in 1949.

B. G I. in fixed capital for 1947 and 1948, total and by economic sectors, from (1), for 1949 and 1950 from (2) Investment by branches of industry 1947-1949 from (3), p. 102. The original figures were adjusted on the basis of information given in sources (1) and (2) to exclude current maintenance and repairs. For industry and transportation separate figures of maintenance are published , for the other sectors the estimates were based on partial data. It is estimated that expenditure on maintenance, etc. comprises some 32 to 36 per cent of total G.I in fixed capital, for the years 1947 to 1950. It was not found possible to adjust the figures of investment by branches of industry in a similar manner.
The I.C. index was taken from (3), p. 99, assuming productivity in building is 80 per cent of pre-war.

Poland (1) *Gospodarka Planowa*, No. 1, 1949 ;
(2) *Gospodarka Planowa*, No. 2, 1951 ;
(3) *Statistical News of the Central Statistical Office* ,
(4) *Wiadomości Narodowego Banku Polskiego*, 1948, No. 4 ;
(5) *Życie Gospodarcze*, No. 5, 1950.

A. The net national income (excluding certain services) in pre-war prices is given for 1949 and 1950 in (2), while 1948 has been communicated directly by the Government These figures have been inflated by the official cost-of-living index as published in (3). 12 per cent was added to these estimates so as to bring them to the uniform definition applied in other countries. Depreciation was assumed to be 6 per cent of net national income. I T were taken from the budgets of the public authorities.

B. Total G.I in fixed capital within the Plan for 1947 and 1948 are the same as in previous SURVEYS G I. by economic sectors within the Plan for 1947 and 1948 and for the whole economy 1949 and 1950 is given as a percentage distribution in (2) and (5) Although it is possible to derive the total value of G.I. in 1949 in terms of current prices, the data have not been utilized, as the level of prices in 1949 in relation to 1948 is not known.
The I.C. index for 1947 and 1948 was taken from (1) and (2).

Rumania · Although figures of total investment in terms of current prices are available, they have not been utilized as changes in the level of prices are not known. Investment within the Plan in 1949 was 111 and in 1950 153 billion lei. (Source : Annual Reports of the Central Planning Board.)

Spain *La renta nacional de España en 1949*, Consejo de economia nacional, Madrid 1950.

A. 1950 has been estimated from data on prices and agricultural and industrial production. Depreciation has been assumed to be about 5 per cent of net national income. I T. have been taken from the budgets of the public authorities.

Sweden (1) Estimates communicated by the Konjunkturinstitutet ;
(2) *Översikt över det Ekonomiska Laget 1951* (National budget for År 1951), Meddelanden från Konjunkturinstitutet, Serie B . 12.

A. Data have been taken from (2). Depreciation was estimated from comparison with Denmark and Norway

B. G.I. in fixed capital, totals, by economic sectors and by branches of industry for 1947 to 1950 supplied by (1). Expenditure on current maintenance and repairs (comprising 30 to 36 per cent of the total) was given separately by the same source

The I C. index was obtained by linking the index given in (2) for 1946 to 1950 to the official wholesale price index of industrial products.

Switzerland. (1) Reports in the Swiss Press, 31 March 1951 ;
(2) *La vie économique*, December 1950 ;
(3) *Annuaire statistique, 1950* ,
(4) Unpublished estimates prepared by Mr. F. Kneuchaurek under the direction of Professor W. A. Johr at the University of St. Gallen.

A. Data have been taken from (1) and (2) Depreciation is assumed to be 8 per cent of national income.

B G.I. in fixed capital for the years 1947 to 1950 are taken from (4). The original figures have been adjusted so as to exclude expenditure on current maintenance and repairs on the part of public authorities.

The I.C. index is an average of (*a*) the building cost indices for Zurich and Basel given in (3) and (*b*) the unit value index for machinery exports obtained by a comparison of the official volume index and the value of machinery exported.

Turkey Sefik Bilkur, *Revenu national et dépenses nationales de la Turquie en 1947 et 1948*, Office Central de Statistique, 1949.

A. Figures for 1948 from the source quoted. Data for 1949 and 1950 have been estimated on the basis of index numbers of wholesale prices and of industrial and agricultural production. Depreciation has been assumed to be 4 per cent of national income I T. were taken from the budgets of the public authorities

United Kingdom : (1) *Economic Survey for 1949* (Cmd. 7647) ,
(2) *Economic Survey for 1951* (Cmd. 8195) ,
(3) *National Income and Expenditure of the United Kingdom, 1946 to 1949* (Cmd. 7933) ;
(4) *National Income and Expenditure of the United Kingdom, 1946 to 1950* (Cmd. 8203) ,
(5) *Working Party Report, Building*, H.M.S.O , London 1950 ;
(6) *Board of Trade Journal.*

A Data have been taken from (2), (3) and (4). As the official estimate of depreciation proper (i e. excluding maintenance) apparently was too low compared with other countries—mainly due to the fact that the estimate is based on the original costs of the investments—it was increased substantially. The new estimate was based on depreciation in 1938 which was lowered by about £40 million to allow for maintenance of roads. It was then assumed that the capital stock of 1949 was about the same as in 1938. The 1938 estimate of depreciation, after being inflated by the I C. index described below, was consequently used for 1949. The volume of 1948 and 1950 depreciation was assumed to be about 5 per cent below and above, respectively, depreciation in 1949 The movement of I.C. 1948-1950 was finally applied so as to put these 1948 and 1950 estimates on a replacement basis.

B. G.I. totals for 1947 to 1950 and by economic sectors for 1948 to 1950 from (4) For 1947, the figures of G.I. by economic sectors were estimated on the basis of information given in (1). The value of vehicles purchased by " Agriculture " and " Industry " was transferred from " Transport and communications " (in the case of commercial vehicles) and " Other " (for passenger cars) G.I. in building and construction machinery and in mining other than coal mining was transferred from " Other " to " Industry ". G.I. by branches of industry for 1948 to 1950 from (4). Expenditure on the current maintenance and repair of buildings, comprising 27 to 29 per cent of total G.I., is given separately for 1948 to 1950. For 1947 independent estimates were made.

The I.C. index is an average of (*a*) an index of average export values of " machinery " and " vehicles (including locomotives, ships and aircraft) " from (6) an (*b*) the building cost index for 1938 to 1949 given in (5), p. 79, linked to 1950 by comparing the movements in the total value of building and civil engineering work and the official index of building activity.

United States.

A. The data are from *The Economic Report of the President* transmitted to the Congress, January 1951 and *Survey of Current Business*, July 1950 and February 1951.

IX. WAGES AND EARNINGS (TABLES 64, 68, XXXV AND CHART 10).

1. Hourly Earnings in Industry (Tables 64 and XXXV and Chart 10).

(a) General

The index numbers shown in Table XXXV relate generally to hourly earnings, expressed in national currency, in manufacturing and gas, water and electricity supply. Building is excluded, except for Belgium, Denmark, and western Germany. Mining is included for Finland, Italy, Norway and Sweden These differences in coverage are, however, unlikely to have any appreciable effect on the conclusions drawn from the figures.

Whenever possible, figures for the last month of each quarter were used In the case of Sweden, however, the data relate to the second month of each quarter, and for the United Kingdom to April and October of each year. In the case of Denmark, Norway and Finland the figures are quarterly averages.

In the calculation of the annual average for 1948, relating to countries for which data are available for certain months only, adjustments were made in order to cover the whole twelve-month period. This, together with rounding, explains why the quarterly data shown for 1948 in Table XXXV do not always average out to 100.

The indices of real hourly earnings have been calculated by application of cost-of-living indices.

(b) Sources and Notes

Austria Information communicated by the Austrian Institute for Economic Research

Belgium *Bulletin d'Information et de Documentation*, Banque Nationale de Belgique

Denmark *Statistiske Efterretninger*. Non-industrial occupations have been discarded from the published averages. The figures for the fourth quarter of 1950 are preliminary estimates based on increases in wage rates granted.

Finland *Sosiaalinen Aikakauskirja* Indices of earnings in industry for males and females have been combined (weights 62/38). Estimates have been made for the fourth quarter of 1950 by means of data in *Konjunkturserier*, Ministry of Finance.

France. *Revue française du Travail*. Normal wage rates, adjusted for overtime work. Building has been excluded.

Germany

U K / U S. Zone *Wirtschaft und Statistik*. Chain index of earnings in industry including building

Ireland *Irish Trade Journal and Statistical Bulletin*. Base : October 1948.

Italy *Rilevazioni statistiche sulla occupazione operaia e la disoccupazione in Italia* An estimate for December 1950 has been made on the basis of data on wage rates appearing in *Bollettino mensile di statistica*

Netherlands *Maandschrift van het Centraal Bureau voor de Statistiek*. Data relate to hourly wage rates, but available information on movements of hourly earnings in industry does not show any substantial divergence from the wage rate series

Norway *Statistiske Meldinger*. Hourly earnings of male and female workers have been combined (weights 78/22) Preliminary estimates for the fourth quarter of 1950 have been made on the basis of increases in wage rates officially granted

Sweden *Sociala Meddelanden* Index numbers of hourly earnings in industry (February 1947 = 100). The index of real earnings was obtained by using the official index of consumption prices published in the same source

Switzerland *La vie économique*. The figures derived from the annual inquiry on wages in October have been extrapolated and interpolated by means of the wage *rate* movement shown with the results of the quarterly industrial inquiry.

United Kingdom *The Ministry of Labour Gazette*. The series for manufacturing industries only, given for the first time in the issue of March 1951, have been used An estimate for December 1950 has been made on the basis of the movement in wage rates, as shown in the same source.

2 Employment, Average Wages and Total Wage Bill in the Non-agricultural Sectors of Eastern European Countries, 1950 (Table 68)

The index numbers (1949 = 100) have been taken or derived from the following sources :

Bulgaria — Average money wages : *Free Bulgaria*, 1 March 1951.
Total wage bill . *Otechestven Front*, 30 January 1951.

Czechoslovakia — Average money wages : *Rude Pravo*, 27 February 1951.
Total wage bill : *Rude Pravo*, 7 March 1951.

Hungary · — Employment : *Szabad Nép*, 26 February 1951.
Total wage bill : *Szabad Nép*, 23 January 1951.

Poland — Average money wage : *Trybuna Ludu*, 22 February 1951. Employment (socialized sector) : *Polish Facts and Figures* (Polish Embassy, London), 27 January 1951.

The effect of shifts in employment between the private and socialized sectors of the economy has been eliminated on the assumption that the shift in employment was proportionate with the shift in production For the share of the socialized sector in national income in 1949 and 1950, see *Gospodarka Planowa*, 1951, No. 2, p 14.

Rumania — Employment : } *La Roumanie nouvelle*,
Average money wage (industry) : } 28 February 1951.

The increase in employment, given in absolute figures, was related to 1950 employment as given (in relation to the plan figure for 1955) in the Five-year Plan : *La Roumanie Nouvelle*, 15 January 1951.

X. INTERNATIONAL TRADE (TABLES 4, 7, 43-46, 48-53, XXVII-XXX)

1. The Trade of European Countries, in Current Prices (Tables 43, XXX)

(a) *General*

The data have, in general, been taken from the official foreign trade statistics of European countries No attempt has been made to adjust the official figures except as mentioned below. The figures relate, wherever possible, to special trade by countries of origin and of consumption However, the import data for the United Kingdom relate to general trade since the break-down of retained imports is not available by countries of origin. The calculations relating to intra-European trade, as well as to overseas exports, have been based, unless otherwise stated, on the export statistics of European countries, while imports from overseas have been based on European import statistics except where, in the absence of any detailed foreign trade statistics, the export statistics of overseas countries have been used.

(b) *Principal Adjustments*

(i) The trade between the western and eastern zones of Germany [1] is not included in the foreign trade statistics of the western zones On the other hand, trade between the following countries is shown as foreign trade in the official trade statistics, but has been considered as internal trade and therefore eliminated : trade of the United Kingdom with the Channel Islands ; trade of Denmark with the Faroe Islands ; trade of Norway with Spitzbergen.

(ii) No statistics are available for the trade of certain Mediterranean territories (Cyprus, Malta, Gibraltar, Albania, etc). They have been included as being part of Europe only in calculating the exports of other European countries.

(iii) Certain relatively unimportant items which cannot reasonably be assigned to any particular region (such as the whale fisheries of the United Kingdom and ships' stores) have been ignored.

(iv) In the break-down of Denmark's trade by countries and by commodities, account is taken of the fact that certain imports which are recorded as originating in the United Kingdom and the Soviet Union, and certain exports recorded as destined for the United States, are actually imports from the British and Soviet Zones of Occupation of Germany and exports to the United States Occupation Zone.

(v) In the monthly trade data for Portugal and Finland, a substantial proportion of trade is not specified by countries. The geographical distribution for the year 1949, which is known in greater detail from the annual statistics, has been assumed to apply to the unspecified portion in 1950

(vi) European imports originating in the United States are different according to the European statistics from those recorded by the United States as exports to Europe. These differences are particularly large in the case of Austria in 1949 and 1950,

[1] Since 15 December 1948, the trade statistics of the western zones include the western sectors of Berlin as part of the customs territory

and Turkey and Greece in 1949, since these countries include only commercial transactions in their statistics. The European figures have been corrected in Table XXX by taking into account the United States figure with an allowance of one month for delay in transport. It is to be noted that, as from July 1950, the country of destination for " special category commodities " is not reported in United States statistics.

(vii) Conversions of c.i.f. figures to f.o.b. values have been made by putting the difference at 5 per cent in intra-European trade and at 12.5 per cent in overseas trade. In Table XXX, trade balances were computed after adjusting imports to an approximate f.o b. basis. In intra-European trade, this adjustment was calculated from the differences between the c i f. values as reported by importing countries and the f.o.b. values as reported by exporting countries.

(c) *Estimates*

The trade of the eastern European countries and of the Soviet Zone of Occupation of Germany in 1949 and 1950, for which no official statistics are available, has been estimated. The trade of the Soviet Zone of Occupation of Germany has been included in the group " eastern Europe " and not with " western Germany ", in Table XXX.

For the trade among eastern European countries (including the Soviet Zone of Occupation) in 1949, the same figures were used as those published in Table XXI of the *Economic Bulletin for Europe*, Vol. 2, No. 2, the sources and methods used in their compilation being described on page 88 of the same publication.

For 1950, the following statements in the Press were used ·

1. *Die Wirtschaft*, 29 November 1950 The share of the Eastern Bloc in the total trade of Czechoslovakia will be 53 per cent of her imports and 55 per cent of her exports (Total trade figures are available for January-September 1950 in the *Monthly Bulletin of Statistics*, Vol. V, No. 4, Statistical Office of the United Nations.)

6 October 1950 : Total turnover of Rumania-Soviet Union trade will increase by 30 per cent over 1949, and the planned increase over 1949 in the trade of both Hungary and Bulgaria with the Soviet Union amounts to 20 per cent.

25 August 1950 Exports of the Soviet Zone of Germany to Czechoslovakia and Poland will increase over 1949 by 13 per cent and 44 per cent, respectively 1 September 1950 Exports of the Soviet Zone of Germany will increase by 56 per cent In the same issue, indices of Soviet Zone exports to eastern European countries for the years 1947, 1948, 1949 and 1950 are given

2. *Polish Facts and Figures*, 18 March 1950 · Exchanges for 1950-1955 between Czechoslovakia and Poland are to be annually about $200 million each way (the increase is assumed to be gradual)

3. *Soviet Weekly*, 25 May 1950 · Exchanges between Czechoslovakia and Hungary are to be $35 million each way

4. *Czechoslovak Economic Bulletin*, 15 November 1950 : Trade with the Soviet Union will equal about 25 per cent of Czechoslovakia s total trade turnover To this was added $22 million on each side for the fulfilment of the textile agreement (*Economie soviétique et Economies planifiées*, August-September 1949)

5. *Vneshnyaya Torgovlya*, 1950, No 11, p. 17 · Poland's trade with the East will amount to 60 per cent of her total trade, and the total turnover between the Soviet Zone of Germany and the Soviet Union will increase by 34 per cent over 1949.

6 *Rzeczpospolity Dziennik Polityczno Gospodarczy*, 2 November 1950 · Poland's total trade in 1950 will equal $1,320 million.

7 *Zahraniční obchod*, 10 November 1950 · Poland's trade with Rumania will increase by 66 per cent and Poland's trade with Hungary by 202 per cent, in comparison with 1949.

8. *Życie Gospodarcze*, 1-15 May 1950 : Poland's imports from Bulgaria and from the Soviet Union will increase by 34 per cent and 50 per cent over 1949, respectively, and Poland's total trade with the Soviet Union will increase by 34 per cent.

9. *Statisztikai Tájékoztató*, 1950, No. 2, pp. 17-19 : Hungary's exports to eastern European countries will increase by 28 per cent over 1949

10. *Prague News Letter*, 1 January 1950 · The total turnover between the Soviet Zone and Czechoslovakia will increase by 50 per cent over 1949.

11. *Polish Embassy Press Release*, Washington, D.C., 7 June 1950 : The total turnover between the Soviet Zone and Poland will increase by 60 per cent in relation to 1949.

For the trade of eastern European countries with overseas, estimates have been based partly on the statistics of their trade partners which were published for a number of non-European countries in " Direction of World Trade ", *Statistical Papers*, Series T, Vol. I, No. 4, prepared by the Statistical Office of the United Nations.

(d) *Conversion into United States dollars*

In general, trade conversion factors into U S. dollars as given in " Summary of World Trade Statistics ", *Statistical Papers*, Series D (Statistical Office of the United Nations) have been used. In the case of Italy and western Germany, the dollar values were taken directly from the official publications.

(e) *Regional grouping of Overseas Countries*

A detailed classification of countries is given with Table XXI of the *Economic Bulletin for Europe*, Vol. 2, No. 2.

2. Index Numbers of the Volume of Imports and Exports (Table XXVII)

(a) *Sources of Published Index Numbers*

For sources and methods of the indices published with the year 1938 as a basis, see last year's Survey, pp. 258-259.

The index numbers of the volume of total imports and exports of European countries shown on the base 1949 = 100 are derived from the sources listed below. In view of the wide variation as regards the base years of these index numbers and of the errors which may intrude when a comparison of adjacent years is made by working back to, and then forward from, a much earlier base, the level of the figures shown in the table is subject to reservations. However, the movement of these figures over short periods is probably less subject to error on this account Index numbers of the volume of trade may be classified into four general types, which are more fully described in the *Monthly Bulletin of Statistics*, *1950 Supplement*, Statistical Office of the United Nations, p. 71. Although only three of these types are represented among the index numbers published by European countries, the definitions of all four types are listed as follows Employing the symbols

Q	=	quantum index,
p	—	unit value of each item,
q	=	quantity of each item,
o	—	the base or other non-current period,
n	—	the current period,

the formulas characterizing each type are

Q_1 Quantum index with fixed weights . $${}_oQ_n = \frac{\Sigma p_o \; q_n}{\Sigma p_o \; q_o}$$

Q_2 Quantum index with moving current weights · $${}_oQ_n = \frac{\Sigma p_n \; q_n}{\Sigma p_n \; q_o}$$

Q_3 Quantum index with moving anterior weights . $${}_{n-1}Q_n = \frac{\Sigma p_{n-1} \; q_n}{\Sigma p_{n-1} \; q_{\;1}}$$

Q_4 Quantum index with moving crossed weights $${}_oQ_n = \sqrt{\frac{\Sigma p_n \; q_n}{\Sigma p_n \; q_o} \; \frac{\Sigma p_o \; q_n}{\Sigma p_o \; q_o}}$$

The following list shows the sources, type of index number and the original base year for all the indices shown in Table XXVII

Country	*Source*	*Type of index number*	*Original base year*
Austria	*Statistische Nachrichten*	Q_1	1937
Belgium-Luxembourg	*Bulletin de Statistique*	Q_1	1948
Denmark	*Statistiske Efterretninger*	Q_1	1947
Finland	*Utrikeshandel*	Q_1	1935
France ·	*Bulletin mensuel de statistique*	Q_1	1949
Germany western zones .	*Der Aussenhandel der Bundesrepublik Deutschland*	Q_1	1936
Ireland	*Irish Trade Journal and Statistical Bulletin*	Q_1	1930
Italy	*Statistica del Commercio con l'Estero*	Q_4	1948
Netherlands	*Maandschrift van het Centraal Bureau voor de Statistiek*	Q_1 (monthly) / Q_4 (annual)	1948
Norway	*Statistiske Meldinger utgitt av Statistik Sentralbyrå*	Q_1	1949
Poland .	*Wiadomości Statystyczne*	Q_1	1937
Spain	*Boletin de Estadistica*	Q_1	1935
Sweden ·	*Konjunkturläget*	Q_3 (quarterly) / Q_4 (annual)	1937
Switzerland ·	*Bulletin Mensuel*, Banque Nationale Suisse	Q_1	1938
Turkey	*Konjonktür*	Q_1	1938
United Kingdom .	*The Board of Trade Journal*	Q_1	1947

For certain countries listed in the foregoing table some further particulars should be noted :

Austria. The index numbers exclude non-commercial (E.R P.) imports

Finland The index numbers are both seasonally adjusted and cumulative In order to obtain an index comparable with those shown for other countries, the official index has been corrected as follows · first, the seasonal adjustment (which is based on the average of the years 1927-1936) has been eliminated , second, the resulting figures have been decumulated by quarters ; third, the index numbers thus obtained have been recalculated with 1949 as the base year The resulting index is of type Q_1.

Germany

Western zones The original index numbers are published with 1936 as the base year. However, these indices have not been used as such for the following reasons first, the indices relate only to the Bizone for the first three quarters of 1949, and to the three western zones since the fourth quarter of 1949 , secondly, the index numbers are based on 1936, while the commodity composition of Germany's trade has undergone particularly wide variations Finally, the implied unit values are, especially with regard to exports, entirely out of line with other evidence on price movements. In these circumstances, special adjustments have been made as follows .

The publication quoted above gives special unit value indices (1936 = 100) by commodity groups For exports, the indices for the four major commodity groups were converted to the base period January-September 1949 and then weighted according to the corresponding current exports for each quarter The total index of unit value thus obtained was then divided into the current value of exports for the three western zones (including estimates for the French Zone in January-September 1949), thus leading to a series of volume index numbers of type Q_1 In this computation, it has been assumed that the movements in prices during January-September 1949 for the French Zone were the same as for the U K /U S Zone

For imports, a more detailed computation was made on the basis of January-September 1949 Unit value indices were calculated for individual commodities covering more than 90 per cent of 1950 imports of food and feeding-stuffs, raw materials and semi-finished products, *i e* six of the eight groups of imports. The total index has been obtained by weighting each of the six series thus computed and the official series for semi-finished and finished manufactures (calculated on a January-September 1949 base) by value of current imports Index numbers of volume of imports from the three western zones were thus obtained by dividing this total index of unit values into the value of imports. Finally, the volume indices have been calculated with 1949 as the base year.

Norway · The index numbers include ships

Poland The index has not been used in calculating the total volume index for Europe, as explained below

(b) *Estimates and Adjustments*

For Portugal, use has been made of a quarterly index, supplied by the Instituto Nacional de Estadistica, which is based on the corresponding quarter of the preceding year

For other countries for which no volume index numbers are available for 1950, estimates have been made which were based on the current trade values expressed in United States dollars (some of them being in turn already estimates), which were converted into 1949 prices on the basis of the following assumptions

For trade among Bulgaria, Czechoslovakia, the Soviet Zone of Germany, Hungary, Poland, Rumania, Yugoslavia and the Soviet Union, prices have been considered as constant in 1949 and 1950 The value, in 1949 prices, of the trade of these countries with countries in the rest of the world has been estimated by applying a unit value index constructed from a sample of commodities selected from the trade between eastern and western European countries A similar calculation has been made for the total trade of Greece.

(c) *Weighting*

The volume index numbers for the various countries have been weighted together for Europe as a whole by means of trade values in 1949, which are on the f.o b. basis for exports and the c i f basis for imports

3. Quarterly Movements in the Value, Volume and Unit Value of International Trade (Table 4)

(a) *Values in U S dollars at current prices*

The values of Europe's exports are the same as those described in section 1 above The imports from overseas have, however, been adjusted to an f.o b basis by deducting 12 5 per cent from the c.i.f figures. The figures for the United States have been derived from the United States statistics

For the " Rest of the World ", the data on exports have been taken from the publication " Summary of World Trade Statistics ", *Statistical Papers*, Series D, Statistical Office of the United Nations It should be noted that the " Rest of the World ", as defined in that publication, does not include Canada, whereas in Table 4 it does Moreover, since estimates are included for

the trade of all eastern European countries, the figures for world exports are higher than those published in the " Summary of World Trade Statistics ", which cover only Czechoslovakia, Poland and Yugoslavia.

The imports of the "Rest of the World" have been obtained by deducting from the world total the imports of European countries and the United States. The figures are therefore necessarily approximate.

(b) *Indices of Volume (i.e. values at January-September 1949 prices) and Unit Values*

(i) *Europe.* Quarterly figures of the value (at 1949 pre-devaluation prices) of total exports and total imports have been obtained for European countries, as described above in section 2. The distribution of total imports and exports as between intra-European and overseas trade was calculated from the quarterly current value figures broken down into intra-European and overseas trade, which were deflated by means of specially computed quarterly unit value indices for Europe's trade with overseas. These indices are :

A — a special index for Europe's exports to overseas.

Owing to the fact that Europe's exports to overseas are almost exclusively manufactured goods, this index has been computed by weighting the export unit value indices for manufactures of the European exporting countries publishing such indices (United Kingdom, the Netherlands, Belgium, Luxembourg, Switzerland, Italy, Germany, Sweden, Norway and France). These indices were weighted, as far as the break-down of the unit value indices permitted, for each country according to the composition of exports to overseas during the first nine months of 1949 and 1950, as shown for groups 3 to 9 in the study described in section 4 below, and between countries according to the exports to overseas of the various countries during each quarter. By means of this index, the value in constant prices of exports to overseas was calculated Intra-European trade in constant prices was obtained by subtracting this value from the total exports in constant prices (determined as explained above)

B — a special index for Europe's imports from overseas.

For this purpose, three separate index numbers were used. First, a special index was calculated for the United Kingdom's imports from non-European countries. The second index is officially published and relates to the imports of France from her own overseas territories. Finally, another index was calculated for the imports of other European countries (including imports of France from overseas countries other than her own affiliated territories).

For the United Kingdom, the calculation started from the indices of average value of imports, published in the *Board of Trade Journal* (1947 = 100). These indices were shifted to the base January-September 1949 = 100, and the total value of United Kingdom imports in constant prices was thus obtained. Then, in order to obtain special indices for imports from non-European countries, a detailed computation was made for each of the 46 groups specified in *Trade and Navigation Accounts of the United Kingdom*, using within each group the individual commodities for which details of imports were available by country of origin In cases where the proportion of imports from Europe is small, *e.g.* for many foods and raw materials, a special index was computed for these imports, rather than for imports from overseas, and their value in constant prices was subtracted from the value, also in constant prices, of the total of imports, thus giving the deflated value of imports from overseas. In a few cases, however, it was preferable to calculate directly the unit value index of imports from overseas, without the intermediate calculation relating to the imports from Europe (*e.g.* for silk, paper-making materials, timber). For imports of articles wholly or mainly manufactured which are generally not important (except for metals and manufactures, manufactured oils, fats and resins, where direct indices were calculated as above), the unit value index for total imports was used for the imports from overseas.

Owing to the fact that the details published by country of origin are not sufficiently complete, the index may have a bias In general, the coverage for Europe was about 75 per cent, but imports from Europe represent less than 30 per cent of total imports of the United Kingdom, and the margin of error is thus reduced

For other European countries the general principle has been, in the case of food and raw materials, to calculate for each major commodity group a special index in terms of dollar prices. These indices have been constructed directly from import unit values of the main importing countries, weighted within each group by the current imports of the country concerned The various commodity groups were weighted together by the current value of imports from overseas of thirteen western European countries. These values were taken from the *Economic Co-operation Administration Special Reports*, "Commodity Imports and Exports 1949 " (September 1950) and " Commodity Imports and Exports of Countries Participating in the European Recovery Program ", January 1949-June 1950 (January 1951). Values for the third quarter were supplied directly by the E.C A., while fourth quarter weights were estimated on the basis of imports into the main importing countries.

Using the special index for the United Kingdom, the index for France's imports from her overseas territories and the index for other European countries, values in 1949 pre-devaluation prices for Europe's imports from overseas were computed. By subtracting these results from the value of total imports in constant prices, intra-European trade in constant prices was obtained.

A second estimate of the value of intra-European trade in constant prices was thus available. After conversion to f o.b figures, the results were fairly comparable with those obtained by deducting overseas exports from total exports. After minor adjustments, a single unit value index for intra-European trade f.o.b. was adopted. The indices for overseas trade were then adjusted accordingly.

(ii) *United States.* The figures were derived from the official volume index (1936-1938 = 100) shifted to the base January-September 1949 = 100.

(iii) *Rest of the World.* The data have been taken from the publication " Summary of World Trade Statistics ", *Statistical Papers,* Series D, Statistical Office of the United Nations, after inclusion of the figures for Canada.

4. Exports from Europe, the United States, Japan and India to Europe and Overseas Countries by Ten Major Commodity Groups (Tables 7, text table (p 20), 48-50, and 53)

(a) *General Plan of the Investigation*

In the present state of international trade statistics, it is not possible to make a complete and exact study, according to uniform definitions, of the exports of European countries and of the United States and Japan, by countries of destination and for well defined commodity groups. It has therefore been necessary in certain cases to use the broad commodity groups where no greater detail exists. Nevertheless, the results obtained may be taken as good approximations of the orders of magnitude involved.

The primary interest of the investigation is centred on the exports of manufactured products The exporting countries considered are the major European exporters of manufactured products as well as the United States and Japan. The countries of destination considered with reference to each exporting country comprise . *(a)* all the countries of Europe (irrespective of the value of the trade), *(b)* all overseas countries, as far as the statistics are available, to which the exports from the given exporting country amounted to about $10 million or over in 1949 or 1950. Exports from the United States to these same overseas countries and to Europe have been included, irrespective of their value Moreover, since a country's trade with its own dependent overseas territories is usually more developed than with other overseas areas, practically all such territories, with the exception of those of the United Kingdom, have been considered in relation to the European mother country. Consequently, the list of countries of destination is different for each exporting country included in the investigation.

All data are based on the first nine months only, adjusted to an annual rate.

(b) *Countries of Destination and Origin considered*

The following list gives the countries of destination included in the study, and the corresponding exporting countries ·

Importing Country	*Exporting Countries (in addition to the United States)*
[a] All European countries	United Kingdom, France, Netherlands, Belgium-Luxembourg, Switzerland, Italy, Portugal, Sweden, Norway, Finland, Germany, Denmark, Japan, India [b].
United States .	United Kingdom, Germany, France, Netherlands, Sweden, Norway, Finland, Belgium-Luxembourg, Italy, Switzerland, Portugal, Japan, India [b].
[a] Canada	United Kingdom, Germany, France, Belgium-Luxembourg, Japan, India [b].
[a] Mexico	United Kingdom, Germany, Italy, Switzerland, Japan.
[a] Venezuela	United Kingdom, Germany, Netherlands, Belgium-Luxembourg, Italy, Switzerland, Japan
[a] Cuba . .	United Kingdom, Germany, Belgium-Luxembourg, Switzerland, Japan, India [b].
[a] Peru .	United Kingdom, Germany, India [b].
[a] Chile .	United Kingdom, Germany, Belgium-Luxembourg, Italy, Switzerland, India [b].
[a] Brazil	United Kingdom, Germany, France, Netherlands, Sweden, Norway, Belgium-Luxembourg, Italy, Switzerland, Portugal.
[a] Uruguay .	United Kingdom, Germany, Belgium-Luxembourg, Italy, Switzerland, India [b].
[a] Argentine	United Kingdom, Germany, France, Netherlands, Sweden, Finland, Belgium-Luxembourg, Italy, Switzerland, India [b].
[a] British West Indies	United Kingdom, India [b]
[a] Colombia .	United Kingdom, Germany, Belgium-Luxembourg, Italy, Switzerland
[a] Australia . .	United Kingdom, Germany, France, Netherlands, Norway, Belgium-Luxembourg, Japan
[a] New Zealand .	United Kingdom, Germany, Belgium-Luxembourg.
[a] Israel . .	United Kingdom, Germany.
[a] India . . .	United Kingdom, Germany, France, Netherlands, Sweden, Norway, Belgium-Luxembourg, Italy, Switzerland, Japan.
[a] Pakistan	United Kingdom, Germany, France, Netherlands, Norway, Belgium-Luxembourg, Italy, Switzerland, Japan.
[a] British Malaya . .	United Kingdom, Japan, India [b].
[a] Ceylon . .	United Kingdom, Japan, India [b].
[a] Hong-Kong .	United Kingdom, Germany, Japan, India [b].
Burma .	United Kingdom, India [b].
[a] Iraq	United Kingdom, Italy, Japan, India [b].

[a] Country included in the sample of Table 49 as importing country.
[b] India has been considered as an exporter only as regards " textiles and manufactures " (Commodity Group 8).

[a] Iran	United Kingdom, Germany, Italy, Japan, India [b].
Thailand	United Kingdom, Japan.
China	United Kingdom, Germany, France, Switzerland, Japan.
Japan	Germany.
[a] French Indochina	France.
Syria and Lebanon	France, Italy.
[a] Indonesia	United Kingdom, Germany, Netherlands, Japan.
[a] Egypt	United Kingdom, Germany, France, Netherlands, Belgium-Luxembourg, Italy, India [b].
[a] British West Africa	United Kingdom, Japan, India [b].
[a] British East Africa and Rhodesia	United Kingdom, Germany, Japan, India [b].
[a] South Africa	United Kingdom, Germany, Netherlands, Sweden, Belgium-Luxembourg, Italy, Switzerland, Japan.
[a] Algeria	France.
[a] French Morocco	France
[a] Tunis	France
[a] Other French Africa (including Cameroons and Madagascar)	France
Belgian Congo	Belgium-Luxembourg, Japan, India [b].
Portuguese Continental Africa	Portugal.
Former Italian Africa	Italy

[a] Country included in the sample of Table 49 as importing country
[b] India has been considered as an exporter only as regards "textiles and manufactures" (Commodity Group 8).

Germany has been treated as a whole when considered as a country of destination, while the trade of the western zones only has been taken into account when considering Germany as an exporter.

For Japan's exports, figures have been taken from *Japanese Economic Statistics and Direction of International Trade*, Joint Publication of the Statistical Office of the United Nations and other international agencies, *Statistical Papers*, Series T.

(c) *Commodity Groups considered*

As regards the commodity groups studied, the classification is essentially that used in the foreign trade statistics of the United Kingdom, with minor modifications. It has, of course, not been possible to reproduce the same classification exactly in all cases, partly because of the diversity of nomenclatures used by different exporting countries and partly because the commodity classifications used for the exports to given countries are often less detailed than those in use for total trade.

The following list gives the composition of each of the ten commodity groups considered in terms of the British nomenclature .

Commodity Classification

Group 1. *Food, Drink and Tobacco*

Class I : Food, drink and tobacco.
Class IV . Animals not for food.

Group 2 *Raw Materials and Articles mainly unmanufactured*

Class II Raw materials and articles mainly unmanufactured.
Class III A Coke and manufactured fuel.
Class III P . Oils, fats and resins, manufactured.
Cement (from Class III B).
Newsprint (from Class III R)

Group 3 *Metals and Manufactures*

Class III C Iron and steel and manufactures thereof.
Class III D Non-ferrous metals and manufactures thereof (excluding partly worked gold, gold leaf, etc).
Class III E . Cutlery, hardware, implements and instruments (excluding watches).

Group 4. *Machinery*

Class III F Electrical goods and apparatus.
Class III G Machinery.

Group 5/6. Passenger Cars and Transport Equipment

Class III S (excluding rubber tyres and tubes).

Group 7. Chemicals and Related Products

Class III O Chemicals, drugs, dyes and colours.

Group 8. Textiles and Manufactures

Class III I : Cotton, yarns and manufactures.
Class III J : Woollen and worsted yarns and manufactures.
Class III K : Silk and artificial silk yarns and manufactures
Class III L : Manufactures of other textile materials.
Class III M : Apparel.

Group 9. All other Manufactures

Class III B . Pottery, glass, abrasives, etc. (excluding cement).
Class III H . Manufactures of wood and timber.
Class III N . Footwear.
Class III Q : Leather and manufactures thereof.
Class III R : Paper, cardboard, etc (excluding newsprint).
Class III T : Rubber manufactures.
Class III U : Miscellaneous articles.
Watches (from Class III E).
Rubber tyres and tubes (from Class III S).

Group 10. Unspecified

Class V : Parcel post.
Unspecified exports.

This year groups 5 and 6 have been combined owing to the difficulty of separating passenger cars for certain countries Group 10 (unspecified), which is essentially in the nature of a residual item, includes, in addition to parcel post, items which are unspecified or insufficiently specified, which should strictly be contained in some other group

(d) *Conversion into 1949 Pre-devaluation Prices*

The figures in national currency for the year 1950 thus collected were adjusted to 1949 pre-devaluation prices by use of special price indices computed for each commodity group for each exporting country The price indices used to translate 1950 trade into 1949 pre-devaluation prices have, in principle, been unit value indices of exports for each commodity group which were weighted according to export values in January-September 1950 Where no unit value index numbers were available, wholesale price indices or specially computed unit values for the principal items included in each commodity group have been used In most cases, distinctions within a given commodity group were made before applying the price index numbers For instance, the nineteen unit value indices of exports published in the *Board of Trade Journal* have been used for deflating the United Kingdom's exports.

The data for the United States have been deflated only for food, since the movements in prices between the two periods are not very important for other groups.

(e) *Changes in Relative Shares of Exporting Countries in Selected Markets for Manufactures (Table 49)*

The percentages shown in the table have been calculated as follows for each importing country included in this computation (those marked [a] on pp 249-250), exports both in 1949 and in 1950 from each exporting country considered have been expressed as a percentage of the exports to that importing country from all the exporting countries considered These percentages have been added together for all exporting countries which have devalued 20 per cent or more (group I) and for those which have devalued less than 20 per cent (group II), respectively

The percentages thus calculated for each importing country have thereafter been averaged (by simple average) for all the importing countries and for each of the three groups of importing countries specified in the table

For some of the importing countries included in the investigation only exports from two or three major suppliers are included. In spite of this, the average percentages and changes in percentages from 1949 to 1950 for groups I and II are relatively reliable, because the countries not included comprise countries both in groups I and II and the errors therefore tend to cancel out The percentages for individual exporting countries, on the other hand, are overstated for all import markets, where other

countries of the same group are left out of the investigation. As these overstatements do not cancel out in the averaging of the percentages for all importing countries or groups of countries, the figures given for individual countries in the table do not add up to the total for groups I and II respectively, except in the case of exports to western European countries, where the investigation is complete—i.e. it includes for every importing country exports from all the exporting countries included in the whole investigation.

Certain importing countries have been excluded from the calculation with regard to those commodities where the devaluing exporting countries accounted for virtually all imports before devaluation, and where their share could not therefore increase much more, as would be true of some of the dependent overseas territories.

5. Trade of European Countries in Constant and in Current Prices (Table 43)

The values of trade in current prices have been expressed in constant prices (average level, January-September 1949) as follows ·

The total trade of the United Kingdom, the western zones of Germany and the rest of Europe was obtained by multiplying the current values for the period January-September 1949 by the volume indices (Table 4). The trade of these countries with Europe was calculated by the same methods as those applied in Table 4 (see Section 3 above).

The imports from the United States and Canada have been deflated by using the appropriate wholesale price indices selected from those given in the *Survey of Current Business* and *Monthly Labor Review* for the United States, and export price indices published in *Trade of Canada, Exports*, January 1951, for Canada. These indices have been weighted together according to the composition of exports of the United States and Canada, the United Kingdom, the western zones of Germany and the rest of Europe, respectively.

The exports to the United States and Canada were deflated by price indices based on Table 48 which gives the value of these exports in January-September 1950 at the prices for the corresponding period of 1949. The price movements for the last quarter of 1949 and 1950 were obtained by difference from export unit value index numbers relating to the whole year.

The trade with " other overseas countries " was obtained by difference.

6. Imports of Food and Industrial Materials by Western European Countries (Tables 44-46)

Imports of Food and Industrial Materials by Fourteen Western European Countries (Table 44)

The value in current prices of imports in 1949 and 1950 for " Food and feeding-stuffs " and " Industrial materials " have been drawn from the special reports by the Economic Co-operation Administration on *Commodity Imports and Exports 1949*, September 1950, and *Commodity Imports and Exports of Countries Participating in the European Recovery Program, January 1949 to June 1950*. Values for the third quarter were supplied directly by the E.C.A. while for the fourth quarter they were obtained from the national trade statistics.

The current values were expressed in pre-devaluation prices of 1949 by the method described above in Section 3, *i e.* by the application of unit values of imports from overseas and from Europe which were calculated directly from the trade returns of the main countries.

Gross Imports of Food and Industrial Materials by Western European Countries from all Sources (Table 45) ; Food Imports of the United Kingdom and the Western Zones of Germany (Table 46).

All data are derived from the figures on the physical volume of imports shown in the national trade statistics of each importing country In order to make the data more comparable, certain products have been converted into their crude equivalents ; in all such cases the conversion factors are quoted below. The appropriate reference number in the Standard International Trade Classification (*Statistical Papers*, Series M, No. 10, Statistical Office of the United Nations, 15 September 1950) is given below for each commodity group.

Commodity	Numbers of Groups and Items in the Standard International Trade Classification	Conversion factors used
Food and Feeding-stuffs		
1. Bread grain	041-01; 045-01, 046-01; 047-01	1 ton wheat flour = 1 25 tons grain 1 ton rye flour = 1 25 tons grain
2. Coarse grain	043-01; 044-01; 045-02; 045-09; 047-02; 047-09	1 ton maize flour = 1 43 tons grain 1 ton oats flour = 2 50 tons grain 1 ton barley flour = 1 82 tons grain 1 ton buckwheat flour = 1.79 tons grain 1 ton unspecified flour = 1.70 tons grain
3. Meat	001-01; 001-02; 002-03; 011-01, 011-02, 011-03, 012-01; 012-02; 012-03	1 head cattle = 0 22 tons meat 1 head pigs = 0 082 tons meat 1 head sheep = 0 0188 tons meat
4. Butter	023 total	
5. Cheese	024 total	
6. Eggs	025 total	1 ton frozen eggs = 1 2 tons shell eggs 1 ton dried eggs = 4 44 tons shell eggs
7 Sugar	061 total	1 ton refined sugar = 1 1 tons raw
8. Fish	Division 03	
9. Oilseeds	Division 22	
10. Fats and oils	Division 41	
11. Coffee	071-01, 071-02	
12 Tea	074-01	
13. Tobacco	Division 12	Smoking tobacco reduced by 10% for packing Cigarettes reduced by 15% for packing Cigars reduced by 20% for packing
Industrial Materials		
1 Coal and coke and patent fuel	311 total	
2 Crude and refined petroleum	312 total; 313-01; 313-02, 313-03; 313-04	1 ton refined oil = 1 11 tons crude oil
3. Crude and finished steel	681-03 to 681-15 inclusive	
4 Copper	682-01	
5. Lead	685-01	
6. Tin	687-01	
7. Zinc	686-01	
8. Aluminium	684-01	
9. Sulphur	272-06	
10. Timber	241-01, 242 total; 243 total	
11. Wood-pulp (dry weight)	251-02, 251-03, 251-04	
12. Newsprint	641-01	
13. Raw wool	262-01; 262-02, 262-03, 262-06; 262-07; 262-08	
14. Raw cotton	263-01; 263-03; 263-04	
15. Hides and skins	211-01; 211-02; 211-03, 211-04; 211-09, 212-01	
16. Rubber	Division 23	

7. Trade of Western European Countries with Eastern Europe (Table 52)

The current values are based on the trade statistics of western European countries which were expressed in 1949 pre-devaluation prices by the use of the following index numbers :

For imports, special unit value indices covering the principal commodities were computed for each of the main western European countries. For other western European countries, the average of these special index numbers was used.

For exports, unit value indices for January-September 1950 were obtained by dividing the values of exports to eastern Europe by the values expressed in 1949 pre-devaluation prices which are given in Table 53. The price movement during the fourth quarters of 1949 and 1950 was estimated from the movement of the total unit value index numbers of the exporting countries.

XI. PRICES AND THE TERMS OF TRADE (TABLES 3, 39, 40-42, 62, 63, XXXIII, XXXIV AND CHARTS 2, 5 AND 7)

1. Index Numbers of Unit Values and the Terms of Trade (Tables 40-42, 62 and Chart 5)

General

All the index numbers used in these tables can be classified under one of four general types described as follows. Using the symbols

P = unit value index
p = unit value of each item
q = quantity of each item
o = the base
n = the current period,

the index numbers are defined by the formulae

P_1 = unit value index with moving current weights $\quad {}_oP_n = \dfrac{\Sigma p_n \; q_n}{\Sigma p_o \; q_n}$

P_2 = unit value index with fixed weights $\quad {}_oP_n = \dfrac{\Sigma p_n \; q_o}{\Sigma p_o \; q_o}$

P_3 = unit value index with moving anterior weights $\quad {}_{n-1}P_n = \dfrac{\Sigma p_n \; q_{n-1}}{\Sigma p_{n-1} \; q_{n-1}}$

P_4 = unit value index with moving crossed weights $\quad {}_oP_n = \sqrt{\dfrac{\Sigma p_n q_n}{\Sigma p_o q_n} \cdot \dfrac{\Sigma p_n q_o}{\Sigma p_o q_o}}$

In shifting the original basis of the index numbers as published or implied in the national sources, and in the calculation of quarterly figures from monthly data, the original indices covering each period were weighted according to the corresponding volume indices

Sources and Notes

The unit value index numbers have, in a number of cases, been obtained by dividing the volume indices into corresponding indices of current values In general, the sources are those given for the volume indices, except in the following cases :

Canada *Trade of Canada, Exports*, January 1951, gives price indices by commodity group.

United Kingdom The index numbers used to compute the terms of trade (Table 42) are taken from the *Board of Trade Journal*, and are of type P_1 (1947 = 100) In Tables 40 and 41, the index numbers are of type P_2 (1950 = 100) published in the same source (31 March 1951)

United States *Business Information Service*, International Trade Statistics Series, U.S. Department of Commerce, gives unit value indices by economic class.

For countries which do not publish official indices of either volume or unit value for manufactures as a whole, or where a re-weighting of the component series appeared necessary because of large shifts in the internal composition of the trade in manufactures, the following series have been combined on the basis of values in January-September 1949 .

Belgium-Luxembourg Semi-manufactures ; finished manufactures.

Canada Fibres and textiles ; wood products and paper ; iron and steel and their products , non-ferrous metals and their products ; non-metallic minerals and their products , chemicals and fertilizers.

Germany western zones Half-finished manufactures , finished manufactures.

Netherlands Textiles , metal goods , chemicals , footwear ; paper products.

Sweden Paper and cardboard , metal products , machinery, transportation equipment.

United States Semi-manufactures , finished manufactures

Chart 5 is based on the series used in Table 41 and the corresponding index numbers of export unit values. The indices for Turkey have been added.

In Table 62, the indices of import unit values used were the same as in Tables 40-42 except in the following cases :

Germany *Der Aussenhandel der Bundesrepublik Deutschland* Index of type P_1 (1936 = 100).

Finland *Monthly Bulletin*, Bank of Finland. Index of import prices of P_2 (1935 = 100).

Ireland · Irish Trade Journal and Statistical Bulletin Index of type P_1 derived from import values at current and 1930 prices

Switzerland · Index of type P_1 (1938 = 100) derived from values of imports and volume indices

United Kingdom : Board of Trade Journal Index of type P_1 (1947 = 100).

2. INDEX NUMBERS OF WHOLESALE PRICES AND THE COST OF LIVING (TABLES 62, XXXIII, XXXIV AND CHART 7)

The index numbers of wholesale prices and of the cost of living shown in the tables are generally those published in the *Monthly Bulletin of Statistics*, United Nations, and *International Labour Review*, International Labour Office, respectively In a few cases, however, other series have been used, and their sources are listed below.

Although the wholesale price index numbers generally relate to raw materials, semi-finished and finished products, both home produced and of foreign origin, finished manufactures and imported goods are often not adequately represented No adjustment, however, has been possible to overcome these shortcomings

Austria Wholesale prices · *Statistische Nachrichten.*
Cost of living · *Monatsberichte des Österreichischen Institutes fur Wirtschaftsforschung.*

Belgium Cost of living : *Bulletin de l'Institut de Recherches économiques et sociales*, Louvain

France Cost of living · *Bulletin mensuel de statistique.* The new index of " family consumption prices " in Paris, 1949 = 100, has been linked to 1948 on the basis of available data showing the price movements of the various items included in the new index

Germany

U K /U.S. Zone Wholesale prices *Wirtschaft und Statistik* The index of producers' prices of industrial products has been assumed to be more representative than the general wholesale price index The original base year, 1949 = 100, has been maintained because of lack of complete data for 1948

Iceland Cost of living *Hagtidindi* The food and rent components which were revised in April 1950 have been extrapolated back to 1948 on the basis of price movements in these items as shown in the old index

Turkey Cost of living *Konjonktur* The index refers to the City of Ankara.

United Kingdom Cost of living The annual index numbers of the cost of living have been derived from data on consumers' expenditure in current and in constant prices, shown in *National Income and Expenditure of the United Kingdom*, 1946 *to* 1950 (Cmd 8203).

3 PRICES OF PARTICULAR COMMODITIES (TABLES 39, 63 AND CHART 2)

Price Changes in Basic Commodities since Devaluation (Table 39 and Chart 2)

The figures shown in the table and in the chart have been calculated from data published in the following sources ·

International Financial Statistics, International Monetary Fund, Washington, D C ,
Wirtschaft und Statistik, Statistisches Bundesamt, Wiesbaden ,
Survey of Current Business, U S. Department of Commerce, Washington, D C ,
Food and Agricultural Statistics, Food and Agriculture Organization of the United Nations, Washington, D C. ,
Foreign Crops and Markets, U.S Department of Agriculture, Washington, D C ,
Wool Intelligence, Commonwealth Economic Committee, London ,
Kommersiella Meddelanden, Kommerskollegium, Stockholm ,
Records and Statistics, Weekly Supplement to the *Economist*, London ,
Bulletin mensuel de statistique, Institut National de la Statistique et des Etudes Economiques, Paris

Movements in Textile Prices (Table 63)

Import Prices of Raw Materials

Import unit values of raw cotton, raw wool and (except France and the United Kingdom) washed wool, weighted by total values of imports in 1949-50 Data are drawn from national foreign trade statistics.

Wholesale Price Indices for Raw Materials and Finished Manufactures

For France, Italy, the Netherlands and Sweden, official wholesale price index numbers for the two groups of commodities have been used. For France a linkage was necessary in view of the change in the index between 1949 and 1950

For Belgium, price indices for textile raw materials and finished manufactures appearing in the successive issues of *Service mensuel de Conjoncture*, Institut de Recherches économiques et sociales de l'Université Catholique de Louvain (Statistiques), were used after linking

For Germany, price indices of raw materials and semi-manufactures were supplied by the Trade Unions Research Institute (WWI) in Cologne.

For the United Kingdom, a composite index of wholesale prices for wool, cotton and other textiles was used

Retail Price Indices for Clothing

In all cases, except Sweden, the clothing component of the cost of living indices were taken. For the Netherlands, a linkage was made between the old and the new indices.

For Sweden, the clothing component of the official consumption price index was used.

4. Dollar Prices of Manufactures, Food and Raw Materials in World Trade (Table 3)

The index numbers (January-September 1949 = 100) are intended to show the divergent movement of manufactures, foodstuffs and raw materials in world trade The index number for the prices of manufactures relates to exports from the United States and major European countries, while the indices for foodstuffs and raw materials show the price movement for imports into the United States, Canada and Europe from the rest of the world. The following notes describe the sources and methods adopted in the calculation of these index numbers.

Manufactures

The index number is based on export unit values of manufactures for the United States and European countries for which unit value index numbers are available, *i.e* those enumerated above in Section 1, where the component series which have been combined into single indices relating to manufactures as a whole are listed for each country concerned. The index numbers, which are quarterly, are weighted according to the value of exports to other overseas countries in the base period January-September 1949.

Foodstuffs
Raw Materials

The index numbers are based on price quotations in dollars, referring to non-European countries, excluding the United States and Canada, which were taken mainly from *International Financial Statistics*, International Monetary Fund, and the *Monthly Bulletin of Statistics*, United Nations. Separate index numbers were obtained for each of the following commodities · Coffee, copra, rice, tea, wheat, beef, cotton, wool, oilseeds and vegetable oils, butter, cocoa and sugar as regards food and feeding-stuffs, and copper, lead, zinc, rubber, tin and mineral oils as regards industrial raw materials. The weighting system used in calculating these index numbers in all cases where more than one quotation was available, are the shares of each country's exports in estimated world exports of the commodity concerned (measured by volume) in 1948, as shown in *International Financial Statistics*.

The index numbers relating to the individual food and feeding-stuffs on the one hand, and the individual industrial raw materials on the other, were finally combined by a weighting system proportional to the value of total imports of each commodity into the United States, Canada and Europe from the rest of the world in 1948. The commodities considered cover about 75 per cent of all food and raw materials imports into that area in that year.

XII. BALANCES OF PAYMENTS (TABLES 5, 6, 54, 56-59 AND XXXI)

1. Network of Current Account Balances (Table 5)

Owing to the lack of precise area break-downs in existing balance-of-payments data, the figures given in the table for bilateral balances and regional totals are largely based on rough estimates and should only be used as indications of the orders of magnitude. Whenever estimates from both sides were available, the apparently more complete and authentic figures have been used. In some cases it has been impossible to obtain any data on service transactions between two areas, and therefore unadjusted trade figures have been used. In some cases, these figures have been combined with rough estimates of the balance of service transactions

The net balances and area break-downs of regions shown in the table do not always agree with similar data from other sources. The differences are mainly due to the following factors :

(i) It is impossible to ascertain the area break-down of certain adjustments made in official balance-of-payments statements. For instance, in Table 54 of this Survey, the total transactions of Europe with the United States have been adjusted for certain offshore purchases (see section 4 below) It becomes, however, impossible to carry out this adjustment when " Europe " is divided into the United Kingdom and other European countries

(ii) In the construction of the table, it has been necessary to combine estimates derived from various sources, and to assume that they are consistent and comparable.

(iii) Certain break-downs in the table are incomplete The official balance-of-payments estimates of Canada, for instance, specify transactions with the United States, United Kingdom, other sterling area, other E.R.P. countries, and " all other countries ". Estimated balances given in the table are based on the Canadian figures (sometimes adjusted for coverage) in the case of all areas except " Latin American Republics " and " Other Overseas Countries ", for which available trade data only were used.

(iv) Additional discrepancies are caused by varying coverage and comparability of the underlying data, by rounding errors, etc Such discrepancies have more serious effects on the accuracy of balance-of-payments estimates than on that of most other types of statistics.

The principal sources used are the following :

United States. *Survey of Current Business*, June 1950 and March 1951.

United Kingdom *United Kingdom Balance of Payments, 1946 to 1950 (No. 2)*, Cmd. 8201.

The area estimates given in the table are based on this document, supplemented by United States and Canadian data and estimates by the Research and Planning Division.

Canada *The Canadian Balance of International Payments*, Preliminary Statement, 1949, Dominion Bureau of Statistics.

Figures for 1950 have been communicated directly by the International Payments Section, Dominion Bureau of Statistics. Balance with the United States has been obtained from the United States side.

Europe, excluding the United Kingdom The figures are based on national trade statistics, supplemented by rough adjustments for service transactions in so far as the geographical distribution of the latter can be estimated. Balances with the United States, United Kingdom and Canada are based largely on information obtained from the estimates of these countries.

All other areas Estimates for the current account balances of Europe, the United States and Canada with these areas have been derived from the sources already mentioned. Estimates of trade balances of these areas with one another have been obtained from available trade statistics, mainly, " Summary of World Trade Statistics ", *Statistical Papers, Series D*, United Nations, Second quarter 1950.

2. Goods and Services Balance of the Primary Producing Countries with Europe and North America, and Means of Financing (Table 6)

For the purpose of this table, the term " primary producing countries " has been used to designate all areas outside Europe, the United States and Canada. The estimates are based on information obtained from the latter group of countries. The sources and methods of calculation are as follows

United States *Survey of Current Business*, June 1950 and March 1951.

Canada *The Canadian Balance of International Payments*, 1926 to 1948, and Preliminary Statement, 1949 and 1950, Dominion Bureau of Statistics.

These estimates have been supplemented from trade statistics and unpublished data.

Europe Tables 54 and 57 of this Survey, and Tables 63 and 68 of last year's Survey.

Estimates for " Other Overseas Countries " in these tables include Canada For merchandise trade, an appropriate adjustment has been made on the basis of European trade statistics For all other transactions, however, it has been assumed that Europe's transactions with Canada cancel out, since the Canadian estimates used include service and capital transactions with Europe.

International Institutions *International Financial Statistics*, International Monetary Fund, Washington, April 1951. Figures given for " financing by international institutions " are incomplete and include only foreign exchange operations and loan disbursements by the International Monetary Fund and the International Bank for Reconstruction and Development, respectively.

The figures given in the table are only rough estimates of the orders of magnitude. This is emphasized by the large " errors and omissions " item, which indicates that the total payments of " primary producing countries " have been under-estimated, or their total receipts over-estimated.

3. The Balance of Payments of Europe and Other Areas with the United States (Table XXXI) and Dollar Aid and the Pattern of International Dollar Settlements (Table 58)

These tables represent a rearrangement of the official United States balance-of-payments estimates, published in *Survey of Current Business*, June 1950 and March 1951. In Table XXXI, the rearrangement attempts to bring out the extent of official financing undertaken by the areas listed in the table. Owing to the nature of the basic information, however, it has not been possible to separate completely official from private transactions. For instance, official long-term capital movements are included in Part B (Private donations and capital movements), while movements of private short-term balances are included under Part D (Official financing). The arrangement of this table thus does not correspond to that published by the International Monetary Fund in *Balance of Payments Yearbook, 1948 and Preliminary 1949*, pp. 410-412

United States statistics do not indicate the individual country of destination for " special category " exports and exports under the Mutual Defense Assistance Program, but only the broad geographical area of destination. All such exports to Europe, including any which may have gone to the United Kingdom, are exports to " Other European countries ". M.D.A.P. shipments destined for the " general area of China " are included under " All other countries ".

Offshore purchases under the European Recovery Program given in Table 58 have been calculated from the following reports by the Economic Co-operation Administration : *Paid Shipments*, 31 December 1950 and 31 December 1949, and *Third Report to Congress*, 31 December 1948. The annual figures were obtained by subtraction from cumulated data, and are therefore subject to errors arising from possible revisions in the figures previously published. Furthermore, figures for 1949 were obtained by subtracting from the total of paid shipments at the end of 1949 the total of reported shipments at the end of 1948, since actual payments are not available for the latter date. This probably results in understatement of the 1949 figures, since there is a time lag between reported shipments and actual ECA reimbursements.

In published ECA data, oil purchases from Saudi Arabia, Iran, Iraq, Bahrein, Kuwait and Israel are grouped together under " Middle Eastern Oil Area ". All these offshore purchases have been entered under " All other countries " in Table 58, and consequently the receipts by the overseas sterling area are considerably understated.

4. Balance of Payments of Europe (Tables 54, 57 and 59)

(a) *Trade Account*

(i) *Trade with the United States*

Data on Europe's trade with the United States in 1948-1950 have been derived from the official United States balance-of-payments estimates, as published in *Survey of Current Business*, June 1950 and March 1951. Trade figures underlying these estimates have been adjusted to compensate for the time-lag, estimated at one month, for the recording of the same transaction on the United States and on the European side Thus United States exports (including re-exports) for the twelve-month period December to November have been taken as representing Europe's imports for the calendar year Similarly, United States general imports from Europe during the period February to January have been taken to represent Europe's exports during the calendar year. It has not been possible to apply a similar correction to merchandise transactions not included in trade statistics

The United States data have further been adjusted for certain offshore purchases made by United States Government agencies Goods purchased in European countries and consumed in, or transferred to, other countries are excluded from Europe's exports to the United States. Similarly, goods purchased outside the United States and transferred to Europe by the United States Government are excluded from Europe's imports from the United States. It is presumed that these two types of transactions are included in Europe's trade with " Other overseas countries ". An offset to the dollar settlements involved is included in the item " Other dollar settlements by European countries outside the United States " in Table 57.

(ii) *Trade with Other Overseas Countries*

The basic data have been compiled from the national statistics of European countries. C i f import figures have been adjusted to an estimated f.o b. basis by deducting 12.5 per cent from the original c i.f. value in all years

The estimates thus derived have been further adjusted to eliminate imports and exports of gold in any form , this adjustment has been possible for France, Switzerland, Belgium-Luxembourg, Netherlands, western Germany and the United Kingdom An estimated deduction has also been made from Europe's imports to eliminate duplication of United Kingdom's re-exports to Europe in cases where countries record their imports by country of origin.

(b) *Service Accounts*

Estimates for service transactions in Europe's balance of payments have been prepared by the Balance of Payments Division, International Monetary Fund. Their derivation is explained in detail in the Fund's forthcoming *Balance of Payments Yearbook, 1949-1950*. Estimates for 1950 are highly provisional, being based on incomplete data

Europe's service transactions with the United States have been obtained from the official United States estimates. Data for Europe's transportation account with " Other overseas countries " are independent estimates supplied by the Balance of Payments Division of the International Monetary Fund. Figures for the total investment income received have been obtained from a combination of national statements, adjusted for coverage, and an estimate for net earnings of investment income from " Other overseas countries " has been derived by subtracting the United States figures from the total. The " Other services " item is a residual, obtained by deducting the above-mentioned estimates from the net services balance reported by the European countries. The large deficit shown on this account in Europe's transactions with " Other overseas countries " is therefore subject to a considerable margin of error.

(c) *The Financing of the Deficit (Table 57)*

This table has been prepared by the Balance of Payments Division, International Monetary Fund. More detailed information on various transactions and terms will be found in the Fund's forthcoming *Balance of Payments Yearbook, 1949-1950*.

The entry in the " Total " column for " Adjustments " represents the difference between Europe's financing of a compensatory nature *vis-à-vis* the rest of the world, and other known, or estimated, transactions In the " United States " column, however, errors and omissions as they appear in the official United States estimates are mingled with multilateral settlements in Part III of the table. The entry for " Adjustments " shown in the United States column of the table represents mainly the adjustments described in sub-section *(a)* above and other statistical discrepancies between the United States and European data as reflected in the compensatory official financing statistics of the two areas. The entry for " Adjustments " shown in the " Other overseas countries " column is the difference between those shown in the " Total " and " United States " columns.

5. Balance on Goods and Services of the Sterling Area with the United States and Canada and with Continental Europe (Table 59)

The table is a combination of official balance-of-payments estimates for the United States, Canada and the United Kingdom described in section 1 above, and trade statistics of European countries.

The column " United States and Canada " is based on official balance-of-payments statements published by these two countries.

Transactions between the United Kingdom and the " Rest of Sterling Area " have been obtained from the official United Kingdom statement (Cmd. 8201). Conversion into dollars for 1948 and 1950 has been effected at the current official exchange rates ($4 03 and $2 80 to the £, respectively) Data for 1949 are less accurate, since they have been converted into dollars at average exchange rates For this purpose, half-yearly data given in *United Kingdom Balance of Payments, 1946 to 1950* (Cmd. 8065) were adjusted for revisions incorporated in Cmd 8201 (assuming that the revisions affected both periods equally) and then converted into dollars at $4 03 to the £ during the first half and $3 31 during the second half of 1949.

Figures for the " Rest of Sterling Area " trade with Continental Europe (*i e*, Europe excluding sterling countries) have been obtained from the trade statistics of European countries, tabulated by the Research and Planning Division The data for service transactions have been derived from available balance-of-payments estimates of European countries. The United Kingdom's trade with Continental Europe has been obtained from the trade statistics of the United Kingdom, imports being adjusted to an estimated f o b basis by a deduction of 10 per cent of the recorded c.i f values. Figures for service transactions are based on official balance-of-payments estimates published in Cmd. 8201 and Cmd 8065 for O E E C countries To these figures have been added an estimate by the Research and Planning Division of the small United Kingdom surplus with European Countries outside the O E E C It must be noted that the final figures as given in Table 59 include also the United Kingdom's service transactions with the dependent overseas territories of other O E E C. countries.

XIII GOVERNMENT EXPENDITURE AND TAXATION (TABLES 66, 67, AND 69)

1 Total and Military Government Expenditure (Table 66)

The figures on Government expenditure given in Table 66 refer to the total of ordinary and extraordinary expenditure, as shown in the budgetary documents, some adjustments have been made to exclude, as far as possible, the purely financial transactions (amortization of debts, certain loans and advances, etc) Military expenditure includes military investments and the expenditure resulting from the new defence programmes, unless otherwise stated in the Notes Expenditure on civil defence is included wherever possible Military pensions are included only in so far as they are charged to the defence budgets.

Military expenditure has been expressed as a percentage of net national income at factor cost on the basis of the figures given in Table XXVI In the case of budget estimates for 1950/51, 1951 or 1951/52, the most recent national income figure available, actual or forecast, has been used

The following list gives the sources used for each country :

Austria *Bundesrechnungsabschluss der Republik Österreich*, 1948, *Bundesfinanzgesetz* vom 17 Marz 1950 fur das Jahr 1950, *Bundesfinanzgesetz* vom 15 Dezember 1950 fur das Jahr 1951, *Statistische Nachrichten*, November 1950.

Belgium *Budget des recettes et des dépenses*, Exposé général et Appendice à l'Exposé général, 1950 et 1951. Figures given for 1948 and 1949 refer to credits granted, those for 1950 and 1951 to proposed credits.

Czechoslovakia *Státní Rozpočet* (Finance Law), 1948, 1949, 1950 J Kabeš, Minister of Finance, Budget Speech, *Rude Pravo*, 10 March 1951.

Denmark · *Statsregnskab*, 1948/49, 1949/50, *Finanslov*, 1950/51; *Forslag til finanslov* 1951/52, figures for 1950/51 include 310 million Kroner for the supplementary budget submitted in February 1951 Military expenditure for 1950/51 and 1951/52 has been estimated on the basis of the three-year programme submitted to the O.E E C.

Finland *Economic Survey of Finland*, August 1950, *Statsbokslutet jamte bilagor*, 1949, *Regeringens proposition till Riksdagen angående Statsforslaget for år 1951*. The figures for 1950 do not include the second and third supplementary budgets (about 8 8 billion markkaa).

France. " Projet de loi de finances pour 1951 ", *Etudes et Conjoncture*, January-February 1951. Military expenditure given for 1951 was reduced by the amount of foreign financial aid actually granted (70 billion francs) Proposed additional expenditure as of 1 May has been included

Germany

Western zones · *Report of the British High Commissioner*, October-December 1950. The data refer to the Federal Government only.

Hungary : *Economic Statistical Bulletin* (Central Statistical Office) No. 2, 1941 ; *Szabad Nép*, Budapest, 13 December 1949 and 1-10 December 1950. The budgets of 1947/48 and 1949 do not include social insurance and local authorities.

Ireland *Finance Accounts*, 1948/49, 1949/50. *Estimates of Receipts and Expenditure*, 1950/51.

Italy : *Conto Riassuntivo del Tesoro* (Suppletivo) 30 June 1949 and 30 June 1950 , *Bilancio di Previsione per l'esercizio finanziario 1950/51* ; *Corriere della Sera*, 28 February 1951. For 1950/51 an amount of 100 billion lire has been added to the original budget estimates on account of the military programme.

Netherlands · *Nota betreffende de Toestand van 's Rijks Financiën behorende bij de ontwerp-begroting voor 1951.* The figure for military expenditure in 1951 is provisional. It has been taken from press information according to which the military budget for 1951 is to be raised to 1,500 million guldens and extraordinary defence outlay will require 2,000 million guldens over the next four years.

Norway . *Nasjonalbudsjettet 1951*, St. meld. No. 1, 1951. The figures refer to calendar years.

Poland · *Statistical News*, No 6, 1949, 7-8, 1950 ; *Ustawa Skarbowa*, 1950 (Finance Law), Dziennik Ustaw 20 April 1950 ; *Trybuna Ludu*, 3 March 1951.

Spain Boletín Oficial del Estado, 23 December 1949, 26 January 1951 ; *Moneda y Crédito*, December 1949 and 1950. Ordinary budget. Figures for 1948 and 1949 represent liabilities acknowledged.

Sweden *Budget-Redovisning*, 1948/49, 1949/50 ; *Riksstat* 1950/51 ; *Kungl. Maj ts proposition till Riksdagen angående statsverkets tillstånd och behov under budgetåret 1951/52.*

Switzerland *Arrêté fédéral concernant le budget de la Confédération suisse*, 1951. For 1950 the supplementary credits (1st and 2nd series) are included.

Turkey *Banque Centrale de la République de Turquie*, No. 74-75, 1950. *Resmî Gazete*, 1 March 1950 The financial year 1949/50 covers fourteen months. The figures given in the table represent 12/14 of the expenditure over this period.

U.S.S.R. *Pravda*, Moscow, 11 March 1949, 14 June 1950, 8 March 1951.

United Kingdom *Financial Statement*, 1949/50, 1950/51, 1951/52 Budget Speech, *The Times*, April 11, 1951.

Yugoslavia *Zakon o opštedržavnom završnom računu za 1948 godinu* (closed accounts), *Tanjug* (Yugoslav Official Agency, Paris), 28 December 1949 , *Opštedržavni Budzet Federativne Narodne Republik Jugoslavije za 1950 godinu*, Sluzbeni list, F.N.R.S. 1950 , *Zakon o opštedržavnom budzetu za godinu 1951*, Sluzbeni list, 13 December 1950.

2. Defence Expenditure Expressed in Terms of Industrial Man-years (Table 67)

Military Expenditure

Figures of military expenditure of European countries for the fiscal years beginning respectively in 1949, 1950 and 1951 were taken from the same sources as the figures of Table 66.

For the United States, military expenditures for the successive calendar years were estimated as follows :

For 1949 – $12 9 billion and for 1950 – $13.7 billion ; Council of Economic Advisers, *The Annual Economic Review*, January 1951, Table 10

For 1951 – $36.5 billion ($32.0 billion for military expenditure, estimate based on *The Economic and Political Hazards of an Inflationary Defense Economy* (see footnotes on page 22 of this Survey), and an estimated $4 5 billion for the foreign military aid programme).

Wage cost of a Man-year of Industrial Labour

Rough estimates of the average wage cost of a man-year of industrial labour were made on the basis of sources shown below. In general, either direct estimates of yearly earnings were drawn upon, or use was made of information on weekly or monthly earnings which were adjusted to an annual basis.

Allowance has been made for social benefits (social insurance, family allowances, paid holidays, etc.) in the countries where they add substantially to the direct wage costs borne by the employer or the enterprise. State contributions are not included. The percentage allowance made is shown below in Table F.

The total yearly labour costs in industry (inclusive of contributions by employers or enterprises to social benefits, if any) used for the establishment of Table 67 were the following (in units of national currency) .

Table F

ANNUAL LABOUR COSTS PER MAN IN INDUSTRY

Country	Percentage allowance made for social benefits	1949	1950	1951
Belgium . . .	24	54,300	56,500	59,500
Czechoslovakia . .	20	53,500	61,900	63,000
Denmark .	—	6,400	6,800	7,500
France	35	252,000	282,000	324,000
Germany, western zones	14	3,100	3,420	3,850
Italy.	*a*	315,000	310,000	340,000
Netherlands	25	2,700	2,900	3,100
Norway .	—	6,700	7,000	7,700
Poland .	20	6,750	7,800	8,200
Spain	.*a*	11,000	11,000	11,000
Sweden	—	5,400	5,650	6,300
Switzerland	—	6,250	6,300	6,350
United Kingdom	7	321	336	353
Yugoslavia	20.7	51,200	51,200	51,200
U.S S.R	5	9,450	9,450	9,450
United States	—	2,750	2,960	3,200

a Allowance for social benefits already made in figures used

Figures for 1949 and 1950 correspond roughly to the yearly levels, whereas figures for 1951 are estimates derived from those for 1950 on the basis of the latest data available in April 1951 on the evolution of earnings since 1950.

The sources used for the calculation of the above figures and the nature of the data available were the following

Belgium *L'économie belge en 1949* gives daily earnings (per 8-hour day) for 1949, from which yearly figures were derived. 1950 has been estimated from movement of hourly earnings.

Czechoslovakia : *Hospodář*, No. 40, 1950, gives monthly wages in first quarters of 1949 and 1950, from which an estimate for 1949 was derived. The figure for 1950 is based on that for 1949 and on a statement by the Prime Minister, quoted in *Rude Pravo*, 7 March 1951.

Denmark · *Industriel Produktionsstatistik* gives average yearly earnings from which figures for 1949 and 1950 were derived by means of known evolution of hourly earnings.

France *International Labour Review*, International Labour Office, gives hourly wage rates, from which earnings were derived by addition of 12.5 per cent (according to a special inquiry in 1948).

Germany ·

Western zones *Wirtschaft und Statistik* gives quarterly data on weekly earnings in the U.K /U.S. Zone from which yearly estimates were derived.

Italy *Rassegna di Statistiche del lavoro*, Confederazione Generale dell'Industria Italiana, gives monthly industrial earnings (inclusive of indirect wages).

Netherlands : *Statistisch bulletin van het Centraal bureau voor de Statistiek* gives total wage bill for 1949, and number of man-years. The figures were adjusted for ceilings in workers' contributions.

Norway . On the basis of data appearing in *Statistisk-Økonomisk oversikt over året 1949* and *1950*, estimates of annual earnings for 1949 and 1950 were made.

Poland : An average monthly wage in 1950 of 18,000 (old) zlotys was communicated by the Ministry of Social Welfare. The figure for 1949 was estimated in relation to that for 1950 on the basis of a statement by the Vice-President of the Council of Ministers, *Trybuna Ludu*, 22 February, 1951.

Spain. Estimates of monthly earnings, inclusive of social wages, were made on the basis of a study by D. Seers.

Sweden Yearly earnings for 1949 and 1950 were taken from *Meddelanden fran Socialstyrelsens Utredningsbyrå*.

United Kingdom: *The Ministry of Labour Gazette* gives weekly earnings for 1949 and 1950 (April and October).

Yugoslavia · A speech by the President of the Council of Ministers gives the daily earnings in 1949 as 140.9 dinars. (*Borba*, 6 March 1950) Employers' contributions to social insurance were 20.7 per cent of wages (Yugoslav Report to the International Bank of Reconstruction and Development).

U.S.S.R. An estimate of the average yearly wage was made on the following basis : (1) The value of the total wage bill of the country in 1948 is given in *Voprosy Ekonomiki* No. 8, 1948, p. 23, as nearly twice that in 1940. The figure for 1940 (162 billion roubles) is taken from *Kalendar Spravotchnik*, 1948, p. 138 ; (2) The total number of workers and employees in 1948 has been indicated as 10 per cent above that of 1940 by the *Report on the Fulfilment of the Plan for 1948*. The figure for 1940 (31.2 million) is given in *The War Economy of the Soviet Union* by Voznessensky, p. 13 (in Russian). The average yearly wage did not change in 1949 and 1950 as compared with 1948.

The average percentage allowance made for social benefits paid by the enterprises was estimated on the basis of the total amount foreseen in the Fourth Five-year Plan as social insurance contributions paid by the enterprises and of the total wage bill in 1950, which is also given in the Fourth Five-year Plan.

United States · *Survey of Current Business* gives average weekly earnings in manufacturing.

In the case of Belgium, France, western Germany, the Netherlands and the United Kingdom the rough percentage allowances for social benefits (net of taxes) shown in the table above were drawn from *Revue Franco-Belge*, June 1950—Salaires et charges sociales en Belgique et dans les pays voisins.

Population

Population figures for 1950 and 1949 were taken from national statistics and from the *Economic Survey of Europe in 1949*, p. 272. Estimates were made for 1951 on the assumption that the last annual increase there shown was repeated in the following year.

Rounding

In view of the rough character of the data on yearly wage costs, the figures for defence expenditure in terms of man-years (three first columns of Table 67) have been rounded as follows .

Below 100,000 man-years, to the nearest 5,000 man-years
Between 100,000 and 200,000 to the nearest 10,000 man-years
Between 200,000 and 500,000, to the nearest 25,000 man-years
Between 500,000 and 1,000,000, to the nearest 50,000 man-years
Above 1,000,000 to the nearest 100,000 man-years

The figures in the last three columns of Table 67 have been derived from the rounded figures.

3. Effective Rate of Income Tax for a Married Couple with Two Children (Table 69)

Information on the effective rate of income tax has been derived from the following sources .

Austria *Der Österreichische Volkswirt*, No. 23, 9 June 1950.

Denmark *Ejendoms og Personbeskatningen i Skattearet 1949/50*, Copenhagen 1950.

France Code Fiscal, *Journal Officiel*, 30 April 1950 ; Projet de loi de Finances pour l'Exercice 1950, Assemblée Nationale, No. 8336.

Germany ·

Western zones · Rudolf Binder, Die Belastung durch die persönliche Einkommensteuer im Deutschland, England, und den Vereinigten Staaten, *Kieler Studien* No. 11, 1950.

Netherlands. *Belastingdruk in Nederland 1949*, Centraal Bureau voor de Statistiek, 1950.

United Kingdom *Ninety-third Report of the Commissioners of His Majesty's Inland Revenue for the Year ended 31 March 1950* (Cmd. 8103)

Italy Estimates based on Law No. 25, 11 January 1951 , G Luzzato " Un Nuovo Colpo alle Finanze Locali ", *Mondo Economico*, 28 January 1951.

Finland, Sweden, Norway *Statistisk Årsbok for Helsingfors Stad, 1950*, Table 303, p. 359, and complementary information supplied by the Statistical Offices of Oslo and Helsinki and by the Konjunkturinstitutet (Sweden).

Information on the total amount of income tax actually paid (the last column of the table) has been taken from official budgets and from official tax statistics. Tax receipts have been related to net national income on the basis of the figures given in Table XXVI.

In addition to details given in the footnotes to the table, the following should be noted .

Finland The figure represents central Government taxes on income and property levied on persons, plus an estimated amount (15 billion markkas) for local government income tax.

France A figure for tax assessments *(rôles émis)* in the first 11 months of the year has been brought to a 12-months basis by multiplying it by $^{12}/_{11}$ The figure thus arrived at has been increased by 9 per cent on the basis of the relationship between total assessment and total tax proceeds for all direct taxes as of 31 January 1951 (*Journal Officiel*, 15 April 1951).

United Kingdom The figure represents the total of income tax and surtax after deduction of an estimated amount for income tax paid on non-distributed corporate profits

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